

Armies and Enemies of Ancient Egypt and Assyria



Egyptian, Nubian, Asiatic, Libyan, Hittite, Sea Peoples, Assyrian, Aramean (Syrian), Hebrew, Urartian, Median, Elamite, Babylonian, Scythian.

3200 BC to 612 BC

by Alan Buttery

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INTRODUCTION

When dealing with the Egyptian and Assyrian Empires the absence of military manuals, and annals of the Greek and Roman type, leads to an embarrassing lack of written material dealing specifically with tactics, organisation, and uniform details.

However, in both cases, there is fortunately a mass of sculptured evidence in the form of battle reliefs, executed by order of the victorious Kings, and also archaeological finds (particularly weapons and armour). Much information can be obtained from the observation and interpretation of these monuments and finds.

Regarding Egypt, the battle reliefs of the New Kingdom Pharaohs at Karnak, Abu Simbel, and Medinet Habu, and wall paintings in the tombs at Thebes and Beni Hassan, provide abundant evidence of highly efficient, well equipped armies. I have chosen the period from approximately 3200 B.C. when Egypt first became unified, until the last great victory over the Sea Peoples in 1185 B.C. From then onwards it was a story of mercenary armies as Egypt was ruled by Libyan and Ethiopian Pharaohs. The period in question represents Egypt's rise to military greatness.

In the case of Assyria, the sculptures from, mainly, the palaces of Kalkhi (Nimrud), Dur Sharrukin (Khorsabad), and Nineveh (Kuyunjik), illustrate many troop types and depict battles of the various periods. In addition, there is written information in the Holy Bible and the works of later writers such as Herodotus, Xenophon, Ctesias, and Diodorus Siculus. The period chosen is from the 12th Century B.C. to the fall of Nineveh in 612 B.C., which really put an end to Assyria as a dominant conquering nation.

As far as I am aware, this is the only book in existence which shows the illustrated chronological development of the armies of both Egypt and Assyria and is therefore unique in this respect.

For those wishing to dig deeper into the subject, I have listed a number of books and journals which the reader will find to be useful.

Egypt

The History of Egypt – J.H. Breasted.
When Egypt Ruled the East – Steindorff and Seele.
The Battle of Kadesh – J.H. Breasted.
The Battle of Megiddo – H.H. Nelson.
Ancient Records of Egypt – J.H. Breasted (5 vols.)
The Journal of Egyptian Archaeology.

Assyria

The History of Assyria – A.T. Olmstead.
Five Great Monarchies of the Ancient Eastern World – G. Rawlinson (vol. 2).
Nineveh and its Remains – A.H. Layard.
Assyria – P.H. Gosse.
Ancient Records of Assyria and Babylonia – D.D. Luckenbill (2 vols.)
Iraq – Journal of British School of Archaeology in Iraq.
Warfare in Biblical Lands – Y. Yadin.
The Chronology of Neo Assyrian Art – T.A. Mahdloom.

For both periods, articles can be found in "Slingshot", the bi-monthly journal of the Society of Ancients; the Journal of Near East Studies; and the Cambridge Ancient History.

The terms "heavy", "medium" or "light" as applied to troop types in this book are not used in any technical sense, but purely relatively.

"Mail" is not used in the restricted technical sense of "Armour constructed of interlaced metal rings" but includes other types of metallic armour, such as scale.

THE EGYPTIANS AND THEIR ENEMIES, 3,200 B.C. TO 1,185 B.C.

MAJOR BATTLES OF THE PERIOD

Most of the accounts of Egyptian battles, especially of the earlier periods, are no more than the number of enemy slain (often exaggerated), but these are the only figures we have, and a list of the booty taken. There is, however, slightly more written information on wars of the New Kingdom. More expanded accounts of the following wars and battles can be found in Breasted's "Ancient Records" (5 Vols.)

Battles up to the New Kingdom (3200-1546 B.C.)

3200 B.C.

Pharaoh Narmer of the 1st. Dynasty put down a rebellion of the Libyan Nomes in the W. Delta and took 120,000 prisoners.

2900 B.C.

Pharaoh Khasekhem of the 3rd Dynasty also fought a war in the north and defeated the enemy, taking 47,209 prisoners.

2600 B.C.

Pharaoh Snefru of the 4th. Dynasty conducted a campaign against N. Nubia and brought 7,000 prisoners back to Egypt.

2325 B.C.

Pharaoh Pepi I of the 6th. Dynasty sent an army of "many ten thousands", commanded by Uni, against the Bedouin of N. Sinai, who were defeated and many prisoners taken. This, the first of five such expeditions, was the first Egyptian invasion of Palestine.

1898 B.C.

Pharaoh Senusert III of the 12th. Dynasty invaded Palestine and Syria as far as Sekmem (Shechem?). The armies of Senusert III went on to conquer Nubia which was annexed to Egypt as far as the Second Cataract at Wadi Halfa.

1547 B.C.

Pharaoh Khamose of the 17th. Dynasty, with an Egyptian army supported by Medjway mercenaries from Nubia, fought the Hyksos who were occupying Egypt. A battle at Nefrusi resulted in victory for the Egyptians who forced the Hyksos northwards, taking many prisoners.

Battles of the New Kingdom (1546-1085 B.C.)

Avaris (1546 B.C.)

Pharaoh Ahmose of the 18th Dynasty besieged the Hyksos stronghold of Avaris, commanded by King Apophis, in the Delta. He succeeded in driving the enemy into Syria where they formed a confederation with other Semitic Princes. They took the stronghold of Sharuhin in S. Palestine which the Egyptian army conquered after a siege lasting 3 years.

Megiddo (1479 B.C.)

Pharaoh Tuthmosis III of the 18th. Dynasty, with an Egyptian army of 15,000 – 20,000, fought a confederation of Syrian Princes at the Canaanite city of Megiddo. The Syrians, with an army of 10,000 – 15,000, were defeated in the chariot charge and driven back to the city. Megiddo was conquered after a siege lasting about a month. 83 Syrians were killed, 400 taken prisoner, and booty included 924 chariots, 2238 horses and 200 suits of armour. The conquest was consolidated by taking the cities of Yenoam, Nuges and Herenkua which yielded 2503 prisoners.

Zahi (1472 B.C.)

Pharaoh Tuthmosis III, with an Egyptian army of 15,000 – 20,000, conducted a campaign in Zahi where the city of Arvad was captured. The victorious Egyptians marched on to capture Tunip where they captured the chief and 329 warriors.

Ullaza (1470 B.C.)

Pharaoh Tuthmosis III took the city of Ullaza and captured 490 prisoners, 26 horses, 13 chariots, and weapons and equipment.

Kadesh (1459 B.C.)

The last of the campaigns of Tuthmosis III resulted in the overthrow of Erkatu, Tunip, and Kadesh, where the Egyptians captured 691 people, 29 hands (slain), and 44 horses. He had first isolated Kadesh from her northern support by capturing Tunip. He then attacked Kadesh after the Egyptian elite troops had effected a breach in the city walls.

Shemesh-Edom (1447 B.C.)

Pharaoh Amenhotep III of the 18th. Dynasty marched against a large army of Asiatics and fought them at Shemesh-Edom. He personally led the action and captured 18 prisoners and 16 horses with his own hand.

1446 B.C.

Pharaoh Amenhotep III, commanding an Egyptian army, fought an action in Nubia and took 740 prisoners and slew 312 of the enemy.

Megiddo, Yenoam (1313 B.C.)

Pharaoh Seti I of the 19th. Dynasty conquered the Shasu Bedouin tribes and went on to capture the cities of Megiddo and Yenoam. He also fought a war with the Libyans in the Delta region and returned victorious with the usual prisoners.

Kadesh (1288 B.C.)

Rameses II of the 19th. Dynasty, with an Egyptian army of 20,000 men, fought the Hittites, led by King Muwatallis, who commanded an army of some 20,000. The Egyptians had 4 divisions of 5,000 men (infantry and chariotry) and the Hittites had 3500 chariots (10,500 men) and 8,000 or 9,000 infantry. The Egyptian army was hit in the right flank by 2,500 Hittite chariots, the other 1,000 chariots and the infantry being kept in reserve. The Pharaoh, with his personal bodyguard, held off the enemy until a relief column of recruits arrived. The result of the battle was indecisive and led to a peace treaty.

Perire (1227 B.C.)

Pharaoh Merenptah of the 19th. Dynasty fought a confederation of Libyans, led by King Meryey, and allied with Sherden, Sheckelesh, Ekwesh, Lycians and Teresh sea raiders. The Libyan army numbered over 20,000. After a battle lasting 6 hours, the Egyptians, mainly due to their archery units, drove the enemy from the field with immense losses. The dead were 6,359 Libyans, 2,370 others, and 218 Kehek, and in addition, they took as many prisoners, of which at least 3,000 were of the sea raiders.

First Libyan War (1193 B.C.)

Pharaoh Rameses III of the 20th. Dynasty fought a mixed army of Libyans and Sea Peoples, led by King Themer, at Usermare – Meriamum. This was an invasion by land and sea and the invaders were beaten back with over 12,535 killed and over 1,000 taken prisoner.

1190 B.C.

Pharaoh Rameses III fought a second land battle which possibly took place in the land of Amor. It was apparently the Sherden mercenaries who drove back the enemy. Incidentally, Sherden troops and Kehek Libyans, were fighting on both sides.

The Great Sea Battle (1190 B.C.)

Immediately after the land victory, the Egyptian forces fought the combined fleets of the Sea Peoples at an unidentified harbour in N. Phoenicia. The archery units on the Egyptian galleys completely decimated the heavily – armed crews of the enemy ships before they could close for boarding. This fire was augmented by more archery units on land whilst other infantry units dragged the enemy from their ships and killed them.

Second Libyan War (1185 B.C.)

Pharaoh Rameses III fought the army of King Meshesher of the Meshwesh Libyans at the fortress of Hatso. The Egyptians poured destructive archery fire into the enemy who were beaten back, taking fire from a second stronghold, and pursued for eleven miles, where they were defeated. In the battle, the Egyptian heavy infantry were preceded by archery units in straight lines. Libyan losses were 2,175 dead and 2,052 taken prisoner. Other booty included 93 chariots and 183 horses.

TACTICAL METHODS

The Egyptian Old Kingdom

Wars of this period were relatively small scale affairs and consisted entirely of infantry. It is very likely that the battle order was a straight line front of light infantry armed with spear, battle axe, or club, and shield. The archery units would have been placed either on the wings or possibly placed behind the infantry line. The archery units would fire, in volleys, upon the enemy, with the centre advancing at the same time to make contact with the enemy front. The opposing lines would then fight hand to hand with axes and clubs until the centre was broken and the enemy driven from the field.

The Egyptian Middle Kingdom

The Egyptian armies of this period were more organised and far more sophisticated as they contained special units of Shock Troops armed with bow, or axe, and shield. These were professional soldiers whose job it was to spearhead an attack in order to effect a breach in the enemy ranks to admit the other Egyptian infantry. The fighting was a series of single combats between men armed with the same weapons. Only the heavy spearmen, with great shields, charged in a line behind their huge shields.

Asiatics

Asiatic armies of this period would have been more loosely organised than the Egyptians as they were mostly Shasu bedouins who were nomadic tribes. They probably fought in scattered units commanded by their own chiefs and not banded together under one leader. These tribal units were comprised entirely of light infantry armed with spear and bow.

Nubians

Nubian armies would have been arranged similarly into tribal units but were no match for the Egyptian infantry especially in the Middle Kingdom. All the Egyptians had to do was simply surround the native encampments (dowars) with archery units and then send in the infantry armed with spear and mace.

The Egyptian New Kingdom

The Egyptian armies of this period were entirely revolutionised due to the introduction of the war chariot and various weapons introduced by the Asiatic Hyksos. The armies now had more striking power at their disposal and the highly trained men were led by a caste of professional officers for the first time in Egypt's history.

When campaigning in Syria, the Pharaoh usually first secured the Phoenician coast in order to use a port as a base by which means he could receive supplies and reinforcements from Egypt by sea. Also, by landing on the coast, the Egyptian army could avoid the long march through Palestine and the Orontes valley. After Tuthmosis III had secured the port of Byblos in this manner he took his army overland and conquered Carchemish. In order to travel by river from Carchemish, the Pharaoh had the boats, which had been left at Byblos, dismantled into sections. These sections were loaded on to four-wheeled wagons drawn by oxen and transported overland to Carchemish where they were reassembled for use. This occasion was the first recorded use, by the Egyptians, of wheeled transport as distinct from the chariot.

Normally, the army advanced in close order, in columns of 4 with the officers in the rear. The chariots were placed either on the right or left flank or in the intervals between the division of infantry.

Skirmishers were sent out in front to clear the line of advance and were followed by the main body and, lastly, the baggage train which consisted mainly of many 4 wheeled carts pulled by oxen.

In battle, the infantry were placed in the centre with the chariots massed on the flanks. The light troops were forward of the heavy infantry and consisted of archer and slinger units. On receiving the order to attack, the trumpeter gave the signal and the archers drew up in line and discharged a volley along with the slinger units. The heavy infantry, armed with spear, khepesh or mace, and shield, then advanced in close order in the form of an impregnable phalanx.

At the same time, the chariotry set off and, gradually increasing speed, swept towards the enemy front line. The first to make contact would be the light chariot units who hurled missiles at the enemy and then wheeled to avoid contact.

Next came the heavy units whose aim was to break up the enemy front, as distinct from the harrassing of the light chariotry. The shock of a heavy chariot charge against infantry would have had a tremendous demoralising effect but would probably have proved too much for the light Egyptian vehicles. They probably initially charged for a head-on collision but wheeled at the last minute as the lights had done and, travelling parallel to the enemy front, gave them a broadside of archery fire from as close a range as possible. This would have been equally as devastating as the Egyptians did not present a stationary target and were protected by the vehicle itself to a certain extent.

The heavy chariotry was probably used in this manner, in sections, in order to break up specific troop or chariotry formations either before or during a battle. Their other equally important function was to pursue and despatch the, by now, demoralised enemy.

Chariots could only operate on level ground, however, and were no use in attacking fortified cities or actually holding ground.

The heavy infantry units, under cover of archery fire, advanced either in phalanx or deployed and formed into long columns, or small distinct bodies, and attacked the enemy in hand to hand fighting. They fought with the heavy mace, the battle axe, or the khepesh, and pressed the wings and centre of the enemy, with the archery units still firing volleys. Bowmen were taught, as well as light infantry, to act either in line or to adopt more open movements depending on the terrain or the enemy.

At this stage, the light chariotry had regrouped in order to charge the enemy with the intention of supporting the infantry units and, at the same time, inflict maximum casualties. The effectiveness of the chariot depended on the skill of the archer and on the demoralisation wrought among the enemy by the charge. Lightness was the main object of the chariot (a man could carry one on his shoulders) which was so balanced that the weight of the men pressed on the pole which therefore spread the load between the horses and the wheels (which were set well back).

When the enemy was encountered, sometimes the warrior would dismount and substitute for his bow, the spear, battle axe, or khepesh, for hand to hand fighting. He would, of course, also use a shield. If he stayed in the chariot then the charioteer, with the reins looped round his waist, held a shield above the bow-armed warrior.

In most of the battles throughout the New Kingdom, Egypt's success was due to courage and hardiness rather than to the strategies formulated by the military commanders.

Siege Tactics

That the Egyptians were well acquainted with attacking fortified strongholds is evident from the battle reliefs. Such a relief, showing the army of Rameses III attacking the Hittites, depicts a fortress with 4 successive battlements to a lofty tower. Scaling ladders were used to gain a foothold on the walls where an Egyptian trumpeter stood sounding the victory signal. The Egyptians forced their way into a stronghold either by breaking down the heavy wooden doors with axes or by setting fire to them.

Movable mantelets were also employed to protect men engaged in the process of mining the walls. As they did this, by means of huge metal tipped lances, units of archers tried to clear the enemy from the walls. The mantelet was a framework supported by poles and with a forked summit, covered with hides. It was large enough to contain several men and so placed that light troops could stand on top. The battering ram was never used by the Egyptians. If the fortress could not be conquered by these methods then it would be besieged by building a wooden wall all the way round in order to starve the enemy out.

Sea warfare

When Rameses III fought the combined fleets of the Sea Peoples the Egyptian archers fired volleys at long range before the enemy could bring their spears and heavy swords into play at close quarters. They did not have any archery units of their own, or relatively few. The Egyptians then, with the use of grappling irons, pulled the enemy ships to close quarters and closed in for hand to hand fighting with battle axe or khepesh, and shield.

Canaanite and Syrian tactics

From the battle of Megiddo it is plain that the strategy and tactics employed by the Canaanites was based on the use of chariotry. The idea was to draw the enemy into their territory by retreating and refusing battle until they were in the vicinity of a stronghold. They would then attack downhill and, if beaten, they could retire to the fortress. If the attack proved successful, they would then be reinforced by an additional force of infantry which was kept hidden for the first part of the action. This body of infantry could either pursue the defeated enemy or, in the case of a defeat, could execute a well planned retreat. In battle, though, the advantage would lay with the Egyptians as they had a larger chariot force and the initial clash would usually decide the battle. Also the Egyptian infantry were better, and more heavily armed, which would give them a distinct advantage in the hand to hand fighting. The Canaanites appear to have adhered to a rigid broad strategical principal and were incapable of reacting to a change in the situation and had to rely purely on sheer force.

The Canaanites were, however, not short of offbeat tactics as Tuthmosis III found before the battle of Kadesh (1459 B.C.). When the Egyptian chariotry were lined up ready to attack the city, the King of Kadesh sent a mare against them. When it is realised that the Pharaonic chariot horses were stallions, wherever possible, one can imagine the result. However, Amenemheb, an Egyptian general, rushed out of the ranks, killed the mare, and returned with the tail to Tuthmosis.

Hittite Tactics

Hittite tactics were similar to the above inasmuch as the initial move was an attempt to draw the enemy into a suitable position near a strongly fortified city. Their chariot force, hidden from view, would then charge in to the attack and hit the enemy, in the right flank if possible. The infantry were kept in readiness some distance away in order to provide reinforcement in the event of success by the chariotry or, alternatively, in failure, to have the chance to make a successful retreat. They would also draw the victors away from their bases of supplies and could, if the opportunity arose, make a renewed attempt at their tired opponent.

These tactics were, like those of the Canaanites and Syrians, very similar to those of other peoples who used the war chariot and were probably formulated by the people responsible for its introduction.

The Hittite chariot would have had an advantage over its Egyptian opponent for two reasons. Firstly, it was a heavier vehicle and, therefore, more advantageous in the clash of the chariotry. Secondly, the Hittite force would have had more striking power, in close fighting, than its enemy counterpart as it contained 2 fighting men and a driver but the Egyptian vehicle only had one warrior.

Libyans

The Libyans were composed of various tribes and originally fought with spear or bow as light infantry. They did not possess any heavy infantry and, also, their greatest disadvantage was the lack of chariots. As an infantry force they would therefore not stand much chance against the Egyptian combined infantry and chariotry, and the majority of the encounters would be a foregone conclusion in most cases.

The Sea Peoples

Most prominent amongst them all were the Sherden and the Peleset. The Sherden, since the time of Rameses II, had been employed as Royal Guards, as they were great heavy infantry warriors with metal helmets and were very fierce. They were extremely efficient in hand to hand fighting, a use to which their round shield was admirably suited. They used the long stabbing sword but were equally as efficient with the khepesh.

The Peleset, later known as the Philistines, did have some chariots which were similar to the Hittite models. Like the Hittites, they rode 3 to a vehicle, thus giving them numerical superiority over the Egyptians (chariot for chariot). They did not have many though and, therefore, did not prove too dangerous as they could not raise enough to provide sufficient impact. They were mainly light and heavy infantry and also used the long sword.

Their greatest disadvantage in battles with the Egyptians was the lack of sufficient archery units. They had very few archers whereas the Egyptian armies were mainly archers both mounted and foot. The characteristic weapon of the Peleset was the pair of spears. They hurled the spears, and javelins, from a short distance and then rushed in to attack the enemy with dagger and sword.

The Sea Peoples relied mainly upon fighting from their ships at close quarters but were unable to do this because of the Egyptian archery units. Their oarsmen were shot down before the ships could be brought near enough for hand to hand fighting.

Nubians

Nubian armies did not stand much chance against the Egyptians due to lack of organisation and weapons. Their fighting methods were very primitive and usually consisted of a skirmish or a mad charge in open order. The organised formations of Egyptian archers would not have had much trouble dealing with them.

ORGANISATION AND FORMATIONS

Egyptian armies up to the New Kingdom

In the Old Kingdom there was no national army but a small standing army of trained Egyptian soldiers which was reinforced by Nubian auxiliaries. In addition, there were local militia units, maintained by local officials and notables (treasury dept., temples) and who had received some military training. These were men who had possibly completed some compulsory service and were on a sort of reserve.

The bulk of the levies, called "recruits", were called for service under national conscription, received some military training, and were fed by the State whilst serving, but were not paid.

The only mention of army numbers is "many ten thousands" and a battalion is mentioned but, apart from that, no actual unit sizes are known.

The only rank appertaining to a regular officer is "army commander" or "general" a rank which, when borne by a Royal Prince, would have been equivalent to c - in - c.

During the Middle Kingdom the Nome governors retained private armies which were organised along the same lines as the national levy. When commanded to do so, by the Pharaoh, they were obliged to provide a quota of troops towards the war effort. These contingents were commanded by the Nomarch's deputy – "Superintendent of the soldiers".

The Pharaoh maintained a Standing army, recruited by conscription, the nucleus of which was composed of units of assault troops who were professional soldiers and were called "Retainers".

The Pharaoh's personal bodyguard, the "Shmsu", was a corps d'elite in sections of 10 men and called "Retainers of the Ruler". At the time of Senusert III this force totalled 60 men.

At the head of the national levy was the Generalissimo who was not a field commander but the Minister of War. The actual commander in battle was the General.

Next in rank was the Commander of Shock Troops who led a 300 man assault unit which was composed of 3 companies of 100 men each. These were mainly archers but some carried axe and shield, and were used as a spearhead in an attack on an enemy or fortified position.

Then came the Instructor of the Retainers who commanded 100 men. At this time, the colonial troops from Nubia and Libya were probably only used for garrison and police duties. These garrisons of the Nubian forts probably consisted mainly of recruits with a small force of Shock troops. Nubians were mainly Kushites from Irthet and Yam and the Medjway, who were the best soldiers. The Nubians of Wawat were generally unwarlike.

The spearmen and archer units were organised in platoons of 40 men consisting of 4 squads of 10 men each and marched 4 abreast.

The main power of the phalanx lay in the axemen and spear units. Although they were all light infantry, some spear units had great shields to give maximum coverage and were very well protected when packed shoulder to shoulder.

Signalling between units was done by runners or trumpeters.

The New Kingdom

Due to the introduction of the war chariot, and new weapons, the Egyptian field armies were now organised into divisions, consisting of chariotry and infantry, and numbering up to 5,000 men each.

At the time of Horemheb, the army was composed of 2 divisions – one in Upper, and the other in Lower, Egypt. Each was commanded by a "Lieutenant – Commander of the Army" responsible to the c - in - c.

The Pharaoh was c - in - c of the forces, with his Vizier as War Minister, and with the assistance of a war council of high ranking officers.

Sety I added another division making 3, named Amun, Re, and Sutekh, and Rameses II added a fourth as well as auxiliaries and other special troops. These divisions were further divided into first and second divisions.

At the time of Tuthmosis III it appears that the main part of the army consisted of infantry although chariotry were employed. The chariot forces were considered as part of the army as a whole, not as a separate arm, and no distinction was made between them and the infantry as independent factions. References of this period are to horse and foot.

By the end of the 18th Dynasty, however, at the time of Pharaoh Amenhotep III, the chariotry became a separate arm of the forces. Military reorganisation had resulted in the splitting up of the armed forces into units of mounted and foot, each with its own administration and organisation.

The smallest unit of the army was the section, which contained 10 men and was in the charge of the squad leader who was an NCO.

The platoon, containing 50 men, was comprised of 5 sections and was commanded by "The Greatest of 50" who was the lowest commissioned rank in the military hierarchy. The platoon was the main sub-unit of the company, the principal and tactical unit of the army, and served as the training unit for new recruits.

The company contained 250 men and was composed of 5 platoons. The company commander was the Standard Bearer, who was also the quartermaster, with an Adjutant as 2 i/c. The Adjutant held an administrative position and was chiefly concerned with the provisioning of the forces. General administration of the company was carried out by the Scribe of the company. Each company therefore contained 3 senior officers, 20 junior officers, and approximately 220 infantrymen.

The next unit larger than the company was the Pdt which was commanded by the "Commander of a Host". These units, of varying size, were composed of at least 2 companies which gave a minimum strength of 500 men and officers. These units were sent into action where a large military force, but not a whole army, was needed (as in brigade) and were supported by units of chariotry if required. The "Commander of a Host" was subordinate only to the General and was one of the highest ranks in the army. One of his duties was to control the incorporation of captured enemies into the Egyptian ranks, or even to command a fortress either in or outside Egypt.

The division, at the most containing 5,000 men, was commanded by a General who was frequently, but not always, a Prince. The Pharaoh, as the c - in - c, usually led the army in person or commanded one division with Royal Princes leading the others.

The "Scribes of the Army" were men of high rank and were in different degrees, some holding the highest ranks of command. These included the "Superintendent of the Soldiers" and "Scribe of the Army". Scribes of lower rank were men such as those attached to a company.

Infantry

The infantry force consisted of 3 main groups — recruits, trained men, and shock troops. The recruits were conscripted men and volunteers, the trained men were regular soldiers, and the shock troops were a corps d'elite called the "Braves of the King" whose duty it was to spearhead the attack.

The strength of the army consisted of archers whose skill contributed mainly to the success in battle. These archery units were divided into corps (as were the chariot archers) and probably constituted the chief part of both wings. In the great Sea Battle, the Egyptian archery units were in 4 man sub sections, and worked in conjunction with slingers.

Though the Egyptians placed their chief reliance on archers, they also attached great importance to heavy infantry. Several bodies of heavy infantry were divided into units, distinguished by the arms carried, and formed the centre. These consisted of men armed with spear, khepesh, battle axe, pole axe or heavy mace, and a shield.

Special infantry units were the "Masa" who were archers armed with war axes in addition to the bow, and the "Nefer" or young troops. The Nefer were probably elite troops and not recruits as has been implied. The mere fact that they were young does not necessarily mean that they were actual recruits. Their commanding officer was the "Chief Commander of Elite Troops" and they were organised in company strength under the command of a Standard Bearer of Elite Troops.

The Bow troops were not archers but were men from the Bow lands (barbarians) and were units mainly from Nubia. Amongst these was, originally, a tribe called the Medjway (Pan Grave people) who were later formed into a separate corps commanded by the "prince of the Medjway". They do not appear to have been an actual part of the Egyptian army but are represented in the same dress and equipment. They were actually police or desert rangers who carried the same ranks as the infantry and were organised on military lines. The Medjway had been used as scouts and light infantry in addition to this since early times.

The Egyptian armies had, from earliest times, always contained mercenary soldiers notably the Nubians who provided the archery units. In addition to the Nubians were recruited Asiatics, Libyans, and eventually the Peoples of the Sea which included Sherden, Peleset, Thekel and Tyrsenoi. Libyan auxiliaries consisted of Meshwesh, Temebu and Tehenu, and Asiatic tribes included the Amu, Mentiu, and Setui.

These auxiliary units were always infantry, with the exception of some Sherden units who were associated with horse teams.

Auxiliary units were commanded by "Leaders of Tribesmen" who were equal in rank to the "Greatest of 50" and therefore subordinate to the Standard Bearer. These foreign units were tactically independent under their own native leaders but organised on Egyptian lines. Auxiliaries are usually shown in their native dress and own weapons and, on rare occasions, in Egyptian dress with Egyptian weapons.

Sometimes foreign troops were used to bring understrength Egyptian units up to full strength when, in this event, they were considered as regulars and not auxiliaries.

Auxiliaries could always be posted for garrison duty but were not considered as part of the actual garrison strength. In this event they were always referred to as "Men of Kush" etc. as against the title of "Garrison Troops" borne by the native Egyptians.

Garrison troops, incidentally, were almost always infantry but some of the bigger ones had attached chariotry units.

Horsemen are depicted at Luxor and Abu Simbel and they are labelled as "scouts". Riding was done on a relatively small scale and these mounted scouts provided reconnaissance and intelligence as well as being able to fight from the horse if need be. These riders are shown armed and one inscription, at Karnak, is translated as "officers who are on horseback" and shows mounted men pursuing the vanquished enemy. Also on the monuments can be seen Syrians and Hittites similarly mounted and presumably these riders served the same purpose as their Egyptian counterparts. The despatch carriers of the Egyptian army, called Heralds, probably included some of the mounted men as well as infantry.

On the march, the Pharaoh's personal staff led the way followed by the sacred disc-crowned ram standard in a single chariot. After this came more officers and the Royal chariot and, presumably, a heavy bodyguard to protect the person of the King. Lastly came the infantry and chariot units of the main army with the baggage train in the rear. When Rameses II marched to Kadesh his army was in 4 divisions spaced some distance apart – so far apart, in fact, that the last one didn't even see the battle.

The infantry, on the march, in order to provide an advance in line when required to attack, would simply turn right or left depending on which flank the enemy attacked from. At the battle of Kadesh, the Na'arun troops, a crack force of Canaanite auxiliaries, were organised in a phalanx of 10 ranks line abreast. The 10 men in each section formed a file, one behind the other, in each rank.

The marines, and rowers for that matter, in the Sea battle are dressed exactly the same as the archers and heavy infantry of the army. It is quite clear that soldiers were used on these ships and evidence shows that infantry units were posted for service on board these vessels. Slingers also served on the Egyptian ships as can be seen from the battle reliefs at Medinet Habu. The helmsman was protected by an archer, sat on the edge of a square structure, whilst a similar construction in the bows contained more archers.

The actual size of a "ship's company" would obviously depend on the size of the vessel in question and could not be of a fixed strength as in the case of an infantry company. These naval companies, however, were always commanded by a Standard Bearer and were only called a "ship's contingent" if they contained a complete company strength of 250 men. It is very likely that these naval personnel were actually land based regular infantry who had to undergo a period of training in a "training contingent of a ship" prior to a posting on one of the army's vessels.

On the warships of Rameses III, the subordinate officer bore the rank of "u'au", as in the case of foot soldiers, whilst the highest rank was "Chief of the Ships", which was equivalent to Admiral.

Chariotry

The war chariots, each bearing a warrior (sinni) and charioteer (gazanna) were divided into light and heavy units both armed with bows. Both heavy and light chariots were the same type of vehicle but the warriors were armed as heavy or light men. Thus the distinction lay not in the chariots themselves but in the respective weapon types.

Chariot warriors came from the middle classes of society and even included personnel from the temples. They were obliged to provide their own vehicle and had to undergo a special period of training. Chariot warriors were mostly volunteers but it is probable that some conscription applied, especially in the lower grades. Chariotry soldiers of foreign lands could also serve as "chariot warriors" which was, incidentally, the lowest rank. The higher grade of chariot warrior was the "first charioteer" as against the simple "charioteer".

Below these charioteer ranks were the "runners" who accompanied the chariot into battle, on foot, and were light infantry.

The basic chariot units were of 5 or 10 vehicles which could be grouped together to form larger units. A "Charioteer of the Residence" commanded either a squadron of 25 vehicles or a double squadron unit of 50.

The "Commander of Chariot Warriors" was the equivalent of the Standard Bearer, probably commanded a number of squadrons, and was of a higher rank than the "Charioteer of the Residence". His superior, the "Group Marshaller of Chariotry" was very likely in command of the divisional chariotry strength and was subordinate to the General.

The largest tactical unit was of 150 vehicles and was usually attached to an infantry division or expeditionary force.

A special unit was called the Katana who were Royal charioteers. They were the highest ranking of all chariot officers and were actually Royal scribes.

At the time of Rameses II, the chariotry were not always under arms and could be kept in reserve in their home town until required (a sort of "A" class reserve). Their weapons and equipment were stored in the central administrative and operative HQ's of the army called "Broad Halls of the Palace".

The Hittites

The Hittite armies were well organised and disciplined and their strength, as in the case of Egypt, lay with the war chariot. Another reason for the success of the Hittites was the use they made of iron in the manufacture of weapons.

These armies were composed of chariotry and infantry of which the latter were more numerous but played a subordinate role, in battle, to the former.

The infantry was largely composed of mercenaries with a central force of Hittites. Special units of infantry, used for swift attacks, were shock troops called the "sutu". These soldiers were probably light archers.

The King's bodyguard was known as the Lulakhkhi and Khabiri and were mercenaries from Elam. These men, who derived their name from Babylonia, were stationed at Hattusas, the Hittite capital, to the number of 12,000.

The largest army raised by the Hittites, at the battle of Kadesh, was of 20,000 men.

The 2,500 chariots at Kadesh were manned by men of various Kings so each unit was probably no larger than 300 vehicles. These units would possibly be further subdivided as the Egyptian units were.

The Sea Peoples

The armies of the Sea Peoples from the Aegean were composed of many peoples who came both by land and sea in a migration more than an invasion. These were various peoples from Crete, North Caria, and the Lycian coast, and included the Thekel, Denyen, Tyresenoi, Weshwesh, Sherden and Peleset.

They were mainly sea pirates, armed with spears and long swords, and were probably divided into the various tribes under their own leaders.

The Peleset chariots, which were of the Hittite type, contained a driver and 2 warriors armed with spear and shield. Heavy wagons with solid wheels are seen with the Peleset and were probably baggage wagons although they could on occasions, have been used to transport infantry to the scene of battle.

The infantry fought on foot, in units of 4 men, each with 2 spears and a round, wooden shield studded with bronze.

The rest of the Sea Peoples were all infantry, except the Teukroi who fought from chariots, and were armed with bow, spear, or straight sword.

Asiatics

It is quite plain that Asiatic armies had been well organised and armed since the time of the Hyksos. They had been taught how to use the newly introduced war chariot by Aryan peoples.

They were highly skilled in chariot warfare and had a definite advantage, initially, in that they possessed the composite bow. They did not, however, have the valour of the Egyptians and were, therefore, at something of a disadvantage in open battle.

They were capable of fielding substantial armies but, as they were formed from many different tribes, they suffered from the lack of unified effort and organisation possessed by the Egyptian forces.

Each individual unit, all consolidated under the strongest or more influential leader, would have been composed of the King and his personal bodyguard. The rank and file of the army would have been composed of conscripted tribesmen with, in some cases, a central force of elite troops.

The chariotry personnel were very likely of the richer classes as chariots would not have been general issue and were probably owned by the individual concerned.

Nubians

The country of Nubia was divided into distinct regions such as Yam, Irthet, and Wawat but all the peoples were known to the Egyptians as the "vile" Kush, which was the Egyptian name for the country.

These tribesmen were never any real threat to Egypt as they lacked any large scale organisation and were only at their best when actually fighting as auxiliaries in the Egyptian forces.

They were incorporated into the armed forces in large numbers and acted in a disciplined manner when officered by native Egyptians or the tribal leaders who were subordinate to Egyptian officers.

The success of the Egyptian infantry units was mainly due to the archery sections which were composed, in the main, of Nubians.

The Medjway were very highly regarded by the Egyptians because of their natural affinity for the military life.

Libyans

The Libyans were originally composed of two peoples namely the Tehenu and the Temehu. These were later joined by tribes called the Kehek and Meshwesh, the latter being the most notable of all the Libyan tribes.

These people never did too well against the Egyptians due to their lack of chariots. When allied with the maritime peoples of the Aegean, during the 20th Dynasty, they did have some support from chariots and also obtained the long sword. They were still, however, basically an infantry force and were, therefore, no match for the Egyptians at this time.

COMPOSITION OF ARMIES

Egyptian

There are no records of the actual proportions of troops used by the Egyptians, especially in the earlier periods. However, up to the New Kingdom, these armies contained 100% light infantry types and, of these, at least 50% were probably archers. These archery units contained a high proportion of Nubians, possibly in the order of from 50% to 60%. The archery units of Egypt, with the powerful war bow, could fire 5 volleys a minute and were feared even down to classical times. Great reliance was placed on these units as they contributed chiefly to the success in battle.

The remainder of the armies was comprised of various units of light infantry armed with spear, battle axe or mace, and shield. Of this force, the higher proportion would have been spearmen in the form of a phalanx in the order of 15% to 25%. The remainder would have, therefore, been composed of varying proportions of axemen, macemen, and slinger units somewhat in the order of about 10%.

In the New Kingdom, a division of 5,000 men is given, in one instance, as containing 1900 archers, 520 Sherden, 1600 Kehek, 100 Meshwesh, 880 negroes, and extra officers. During this period, the army contained chariotry in addition to infantry although there is no indication as to the relative ratios. The inscriptions say that each division contained both infantry and chariotry and was a complete army unit.

The chariotry constituted the initial striking power in battle and must, therefore, have been an efficient organised force. As to actual numbers, the tactical unit of 150 vehicles usually attached to a division would give a figure of 3% chariots and would have been a minimum force. This would have given Rameses II a total chariot force of 600 vehicles at Kadesh which is a ridiculously low figure compared to the known numbers of the Hittites in that particular battle. The Egyptians would have been outnumbered by more than 6 – 1 and would have had no chance whatsoever.

It is more likely that the Egyptians had a similar ratio to their enemy. This would possibly have been in the order of a divisional strength of 25% chariots which would have accounted for 50% of the total manpower as each vehicle contained 2 men.

The remaining 50% of the army would be comprised of companies of spearmen, axemen, khepesh or macemen, and slingers, with a higher proportion of spearmen, possibly 20% – 25% to form the phalanx centre.

At this period, mercenaries accounted for 60% of the total with only 40% regular troops. Of these regular soldiers, only roughly 33% were native Egyptians: the other 66% were comprised of the Na'aruna (youths) and the Pidt (bow company – recruited from the neighbouring tribes of Nubia).

The chariot units were composed of regular soldiers in the main and all of these warriors were archers.

Hittite

At Kadesh, the Hittites, had 2,500 chariots with another 1,000 in reserve. In addition to this they had 8,000 or 9,000 infantry. They, therefore had 10,500 chariot personnel who were mainly spearmen, and the infantry force composed of spearmen and archers. 30% of the chariot riders were, of course, drivers but they would have fought on foot as axe or spear men in hand to hand fighting. Chariots, therefore, accounted for just over 50% of the total manpower as there were 3 men to each chariot.

Of the infantry, probably over 50% were spearmen. The remaining infantry units would be axemen in the order of 30% and archers about 20%.

Sea Peoples

Of the Sea Peoples, the most numerous were the Peleset and the Sherden. Part of the invading force came by sea but the numbers are not known although the Peleset appear to provide the higher percentage. Other tribes and peoples included the Shekelesh, Weshesh, Luka, Denyen, Tjekker and Teresh, but there is no indication as to the relative proportions.

Of the land forces, at least 80% would have been infantry as only the Peleset are seen in chariots. These infantry were composed of units of spearmen who also carried swords.

There was a distinct lack of archers.

Nubians

Nubians were exclusively an infantry force and were composed of various tribes, each led by their own chief and his officers.

They were extremely good archers and these provided the majority of their forces. Other infantry were armed with the broad-bladed spear or simple hardwood club.

Asiatics

The Asiatic armies encountered by the Egyptians at the time of Tuthmosis III were fairly well organised and were capable of putting between 10,000 and 15,000 men in the field. These armies were combined forces, each led by their own King, consolidated under the leadership of the most influential Kingdom.

Chariots formed a considerable portion of the Asiatic strength and carried 2 men as in the case of the Egyptian vehicles. Asiatic charioteers were armed with bow and spear and some wore armour.

The infantry, inferior in strength and efficiency to the chariotry, was also composed of archers and spearmen.

Libyans

The early Libyan tribes were almost all spearmen and javelinmen with only a few archers. When allied with the Sea Peoples they employed swordsmen but never had any chariots at all and did not stand much chance against the Egyptian chariotry and archery units for which they had no real defence.

DRESS AND ARMS

OLD KINGDOM

1. **Officer:** This man wears the simple wrap round kilt of white linen with a dagger in the belt. He is carrying a mace with a stone, pear-shaped head.
2. **Infantryman:** He wears his hair long for protection and carries a shield of bull hide stretched over a simple frame of wood. The shield was held by means of a horizontal bar. The battle axe has a semi-circular head of beaten-copper which is lashed to the wooden haft by rawhide thongs. An improved form had a heavier, deeper, blade with a rounded cutting edge and concave sides.

MIDDLE KINGDOM

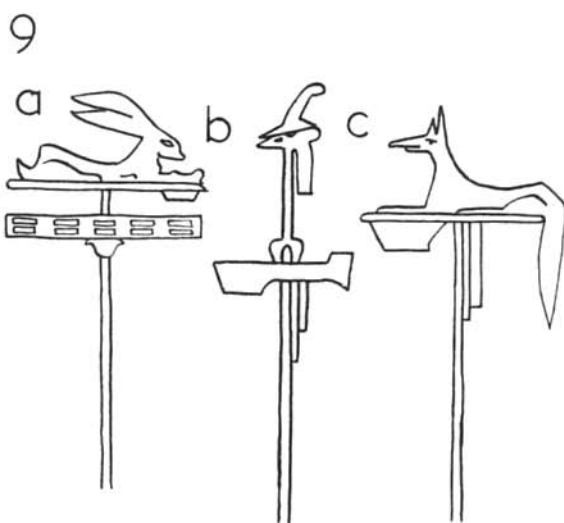
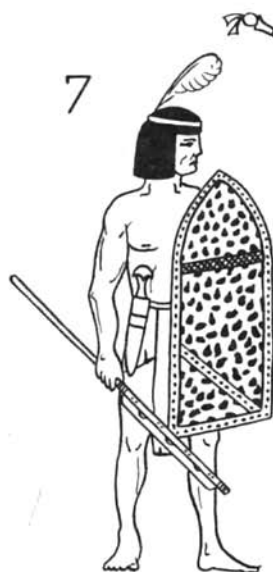
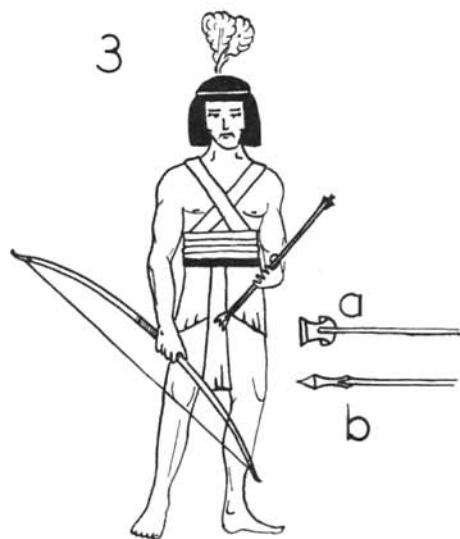
3. **Archer:** This man is armed with the single curved war bow, circular in section, and made from a single piece of wood. This bow was capable of driving an arrow, tipped only with hardwood, clean through a man's body. Arrows, which were carried, had either (a) chisel shaped heads made from flint flakes or (b) pointed heads of ebony, copper, or ivory.

The linen kilt was shortened in front to facilitate ease in marching and the groin was protected by an additional fold of linen. Linen bands were wound round the upper part of the body and also crossed over the chest. A leather wrist guard was worn for protection against the bowstring and feathers were worn in the hair as a symbol of victory.

4. **Light Spearman:** The spears had a long flat head of copper and were about 5'6" long. They were used mainly for thrusting, but could be thrown at close range. For hand to hand fighting this man is also armed with an epsilon bladed axe which was useful against warriors who were not wearing helmets.

The trapezoidal shield was of bull hide, edged with leather, and with a transverse brace $\frac{2}{3}$ of the way up. This stiff hide was fixed with the hair outwards and could stop an arrow of this period. They provided adequate protection against axe or club if they were held so that the crossbar received the blow.

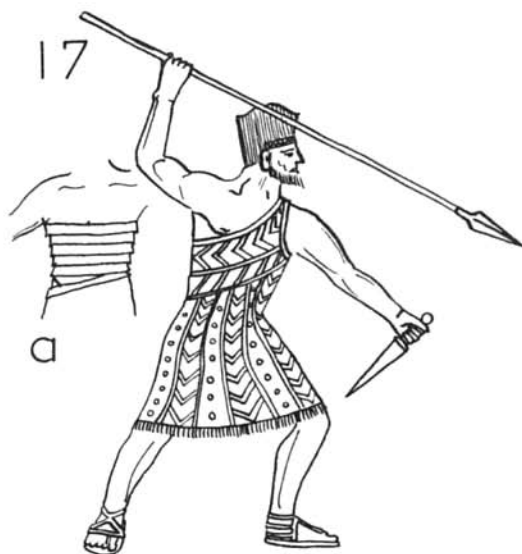
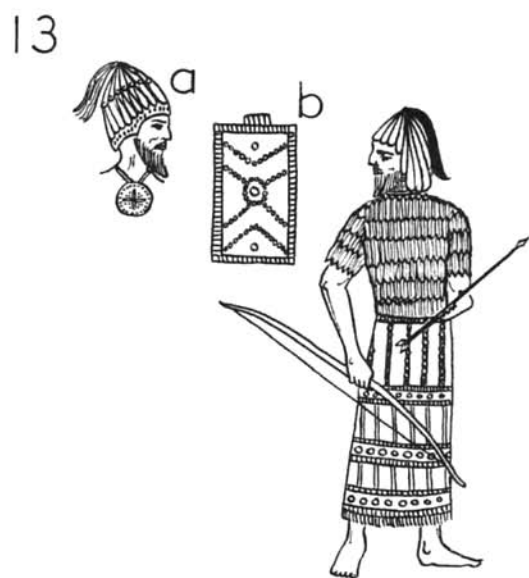
5. **Nubian Archer:** These warriors, as well as being enemies of Egypt, were used as auxiliary archers. They wore a short kilt, held by a belt and with a long leather lappet in front for protection. They also wore a feather in the hair and were armed with the double curved bow of Nubia.
6. **Phalanx Spearman:** These men were armed with the same spear as No. 4 but were protected by a great shield which covered almost all of the body, thus giving protection from head to foot. In addition to the spear, this man would also have carried either a dagger or axe for hand to hand fighting.
7. **Axeman:** The weapon carried by this man is the "long axe" or fighting baton which had a long, narrow, copper blade with a straight or rounded cutting edge. These weapons were between 4' and 5' long and were more like an edged club or quarterstaff. In addition to this he carries a dagger with a tapered copper blade with a short wide handle. The crescent shaped pommel enabled the weapon to be held in the palm of the hand as this was the method of holding a dagger at this time. The weapon is kept in a wooden sheath and has a blade 7" long. The shield is covered with panther skin.
8. **Javelinman:** The warrior shown is dressed as No. 3 but carries the trapezoidal shield and is armed with a hardwood club for close quarter fighting. Clubs were short, thick, staves with a curved end for striking. The javelin has a copper point, diamond shaped in section, and a metal knob at the other end to serve as a counterbalance. This knob was also used to prevent the javelin from leaving the hand when thrown at close quarters. The javelin was slipped through the hand but retained by means of the knob.



9. **Standards:** Egypt was divided into Nomes, or provinces, each of which bore its own coat of arms. When in battle the Nome insignia, carried on a pole, served as the standard of the Nomarch's forces.
 - (a) Standard of the Hare Nome which represented the 11th and 15th Nomes.
 - (b) The Sceptre Nome (uab) represented the 19th.
 - (c) Anupu, or the Black Dog Nome, represented the 17th province.

NEW KINGDOM (18th DYNASTY)

10. **Pharaoh Ahmose:** Ahmose is dressed in the shendyt kilt of pleated white linen and held up by an ornamental beaded belt fastened by a gold clasp. On the richly decorated head fillet is the uraeus serpent which was the symbol of royalty. In his belt is the two handed sword which was cast in a single piece of bronze. The axe carried has a gilded bronze blade which is secured to the cedar wood handle by gold wire. The blade design is in blue enamel and depicts a horse and rider. The sandals are of red leather and gold.
11. **Officer:** This man wears an upper linen dress and a kilt with a puffed out front piece characteristic of the 18th. Dynasty. He carries a staff and wears a long wig. The gold collars and golden fly are decorations received from the Pharaoh as recognition of military achievement. The sandals are of plaited rushwork.
12. **Infantryman:** This spearman carries a round topped shield of wood, painted, and bearing the insignia of the Royal House, and is evidently a guardsman. The spearhead is fastened to the shaft by nails and bound. The battle axe or "akas" was the most characteristic of all New Kingdom weapons, had a slender whippy haft, and may have been used as a throwing weapon. This was used by infantry and marines to despatch enemies laid low by missile fire. The blade was of bronze.
13. **Syrian Chariot Warrior:** This man wears a helmet of leather strips with a tail of horse hair. Over the characteristic long garment is a cuirass of metal scales sewn to a leather jerkin. (a) is an alternative style of helmet, and the warrior wears a medallion. (b) is the rectangular buckler of leather covered wood embossed with metal nails and with an extra protective piece at the top.
14. **Horseman:** This scout or messenger wears a wig and fillet. His kilt is of cut leather with an additional leather patch at the seat for protection. He is armed with bow and arrows to enable him to fight from the horse if need be. He rides the horse bareback and sits well back.
15. **High Ranking Officer:** This man wears a cuirass of 4" bronze scales sewn on to a leather or linen jerkin. The scales were sandal shaped and had an embossed ridge down the centre for strength. This type of cuirass was normally only worn by high ranking officers of the Palace guard and Royalty. Daggers were now of more slender proportions and some had ribbed blades and an ivory pommel. The handle was an inlaid grip of wooden plates. He carries his staff of office and wears leather sandals.
 - (a) shows details of plate armour scales.
16. **Hyksos Chariot Warrior:** These Semitic invaders wore an embroidered woollen tunic and a board belt, over which was worn a long cloak. The leather helmet had flaps to protect the ears and a projecting piece at the back covering the nape of the neck. They were bearded and armed with spear and dagger and wore sandals with leather ankle straps and heel piece.
17. **Canaanite Spearman:** Canaanites, from Southern Palestine, wore either a kilt type garment from waist to knee or a longer garment secured over one shoulder. This warrior wears a cap of leather or thick material with a frontal band. He wears sandals and carries dagger and spear. (a) Canaanites are sometimes shown wearing banded armour of either metal or leather.



NEW KINGDOM (19th DYNASTY)

18. **Pharaoh Rameses II:** The Pharaoh is wearing the khepresh, or war crown, of blue leather with the uraeus serpent at the brow. The long garment, characteristic of the 19th Dynasty, has wide sleeves and descends almost to the ankles. Over this was worn an upper dress over which was sometimes worn a coat of mail covering the breast and back. The dagger of gilded bronze has a pommel in the shape of a hawk head and the battle axe is ornamented with the head of a lion. These were the actual weapons of Rameses II. The pendant object bears his name.
19. **General:** This man, a Royal Prince, commanded an army division. He wears an artificial "youth lock" of leather and stiffened linen, and the long garment of this Dynasty. He carries a single ostrich feather as a sign of his rank and is armed with a small axe which was suspended head down from the belt. His garment is of white linen with a wrap around linen girdle.
20. **Chariot Warrior:** All chariot warriors were armed with a bow, a composite one in this case, but which could have been made of yew. He wears a bronze scale cuirass with 2" by 1" scales which had been reduced from the earlier size of 4" for flexibility and lightness. The size was decreased but the number of scales was therefore increased. The II horizontal bars of metal plates were secured by bronze pins and the sleeves went almost half way to the elbow.

The quilted linen helmet, without tassels, peculiar to charioteers and spearmen, descended to the shoulders and was fringed with leather: the front was a separate piece.

The chariot warrior's badge of office, (a), was attached behind him on a broad belt.

21. **Heavy Infantry (Poleaxe):** The cuirass of padded linen or horsehair extends almost to the knee and is tightened by a girdle to prevent the weight of it pressing on the man's shoulders. His helmet descends to the ear and has an additional piece to protect the nape of the neck. The pointed summit bears 2 tassels coloured black, green, or red.

The pole axe was about 3' long and had a blade from 10" to 14" long and 2" to 3" wide. The 4" diameter bronze ball provided the weight for this formidable weapon which no shield or armour could withstand.

22. **Heavy Infantry (Mace):** Over the linen hauberk is worn a cuirass of thin leather strips, held in place by braces passing over the shoulders and extending to the waist. The padded helmet is a rounder shape and does not cover the ears. These helmets were usually white with red stripes. The triangular front piece of the white linen kilt is of stiffened linen to offer protection below the cuirass.

The mace was similar to the pole axe but had no blade. It was made of wood bound with bronze and had an angular piece of metal projecting from the handle to serve as a hand guard. In addition, he carries an eye axe which had been introduced to combat armour and helmets. The round-topped shield with parallel sides has a round depression near the top to take a bronze boss possibly indicating the unit name, and is edged with leather studded with bronze nails.

23. **Heavy Spearman:** These men wore the same helmet as the chariot warriors. The short cuirass is either of padded linen or horsehair with a stiffened linen lappit for protection of the groin.

At this period, all spear, javelin and arrow heads, had tubular sockets which fitted round the shaft and extended along the blade to form reinforcing midribs to give added rigidity and a stronger union. The spear butt, socketted like the head, was 10" long and circular in section.

The shield was strengthened by one or more rims of metal studded with bronze nails. In this case, the handle is situated so that the arm can pass through it to grasp a spear. The khepesh, with bronze curved blade, was ideal for hand to hand fighting.

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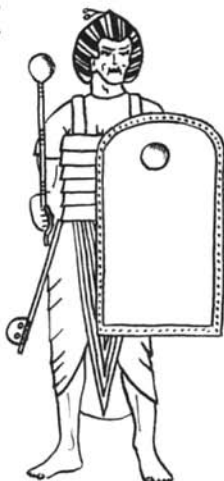
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24. **Heavy Archer:** Heavy archers wore a cuirass of studded leather which extended to the knees. Alternatively, this man could have worn a metal scale cuirass as he was unable to carry a shield.

The padded helmet extends to the shoulders and is fringed at the base. The quiver was supported by a belt passing over the shoulder and was slipped into a horizontal position in order to draw out the arrows beneath the arm. The leather wrist guard was secured to the arm by a thong tied above the elbow.

25. **Light Archer:** This man, protected only by a padded linen helmet with tassels carries a composite bow which had been introduced by the Hyksos and was a powerful, long range, weapon up to 6' long. It was constructed of layers of horn glued to front and back of a grooved wooden core, bound with birch bark, and required the toughest sinews for the string.

The bow-case depicted is a sheath with open ends which was put round the bow when held in the hand on the march. The battle axe shown had a shortened head and a narrower cutting edge.

26. **Slinger:** He wears no protection with the exception of a quilted helmet with tassels. The sling was of plaited leather thongs and the stones were carried in a linen or leather bag. The weapon carried in the belt is a simple mace which was merely a stout stick bound with bronze wire and provided with a hand guard.
27. **Light Javelinman:** This man wears no head protection so wears his hair in a great shock. The shield strap could be lengthened to enable the shield to be slung on the back for ease in marching or protection. Some shield handles were perpendicular but the horizontal one was the more usual type.

The javelin cases were made of spotted bulls hide like the shield but were not provided with straps as they were carried on the shoulder by members of the "ammunition parties".

The khepesh shown was carried by both light and heavy troops.

28. **Standard Bearer:** The officer shown carries the divisional standard of Amun, beneath which is a small figure of the Pharaoh, and bears the rank of "Standard Bearer of the Army". The badge worn round his neck is of 2 lions and was the emblem of courage. His only protection is a quilted helmet and an eye axe.
29. **Trumpeter:** The trumpeter always gave the signal to attack by blowing a number of blasts on the instrument. The trumpet was 18" long and made of copper or bronze and sometimes silver. He also carries the wooden trumpet former which was inserted when the instrument was not in use. This was in order to maintain the shape of the fragile instrument and could also have been an aid in cleaning.

He wears a padded helmet but carries no weapon.

- (a) The long drum, used on the march, was carried by means of a shoulder strap. Drummers were dressed the same as the trumpeter and were usually stationed behind the standard bearers.
30. **Sherden:** These sea pirates were first engaged as mercenaries by Rameses II who had defeated them in battle. They constituted the main part of his personal bodyguard. They had a fair complexion and wore long hanging moustaches and large earrings.

The bronze helmet was horned and surmounted by a bronze ball raised up on a small shaft. The armour was of leather studded with metal and was worn over a pleated kilt and secured at the waist by a girdle. They carried a small round wooden buckler with bronze studs and rim, and were armed with a great bronze stabbing sword.

They originated from Sardis in Lydia.

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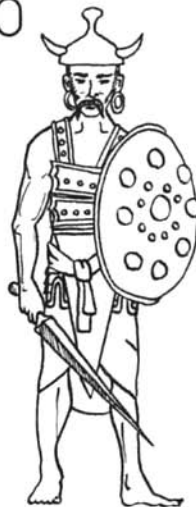
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31. **Standards:** During the New Kingdom, the old Nome standards became regimental ensigns and were augmented by other military and naval innovations.

These standards were either of painted wood or metal, or a linen covered wooden framework. They were mounted on a long pole and usually had coloured streamers attached to the device. Most standards had a wooden stand to fix them upright, or a pointed metal butt to fix into the ground when not being carried.

- (a) was the commonest form and was confined to military and naval use. This standard, of painted wood, was identical in appearance with the flabellum of ostrich feathers which was an object of state borne behind the Pharaoh. Usually it was painted to imitate coloured feathering but was sometimes of a solid red colour. The streamers were red or red/green.
 - (b) The rectangular standard was usually coloured yellow but was sometimes white or red. The cartouches would bear the Royal name but an alternative device could have been the name of the corps represented. The ostrich feather signified victory and the ensign was also streamered.
 - (c) This device represents the “djed” pillar surmounted by the sun disc and plumes, and probably represented men recruited from Abydos.
(d) and (e) probably also refer to the localities from which the men were recruited. In that case, the former would also signify Abydos, and the latter most certainly Hermonthis.
 - (f) is a parade standard bearing, in a cartouche, the prenomen of Hatshepsut, and surmounted by horns, plumes, and uraei.
 - (g) The “lion and fan” standard was carried by marines and was probably painted the same as (a) with the lion in yellow.
 - (h) The “falcon and ostrich plume” was another naval standard with the feather in white and the falcon in brown, yellow, and white.
32. **Medjway Standard Bearer:** These were the best auxiliaries that the Egyptians recruited from Nubia. They were employed as infantry and scouts and were also used as a kind of police force and border patrol.

As he is an officer, the standard bearer wears a linen loincloth and a wig. In addition to the standard, which shows a gazelle and ostrich feather, he carries a battle axe and sling.

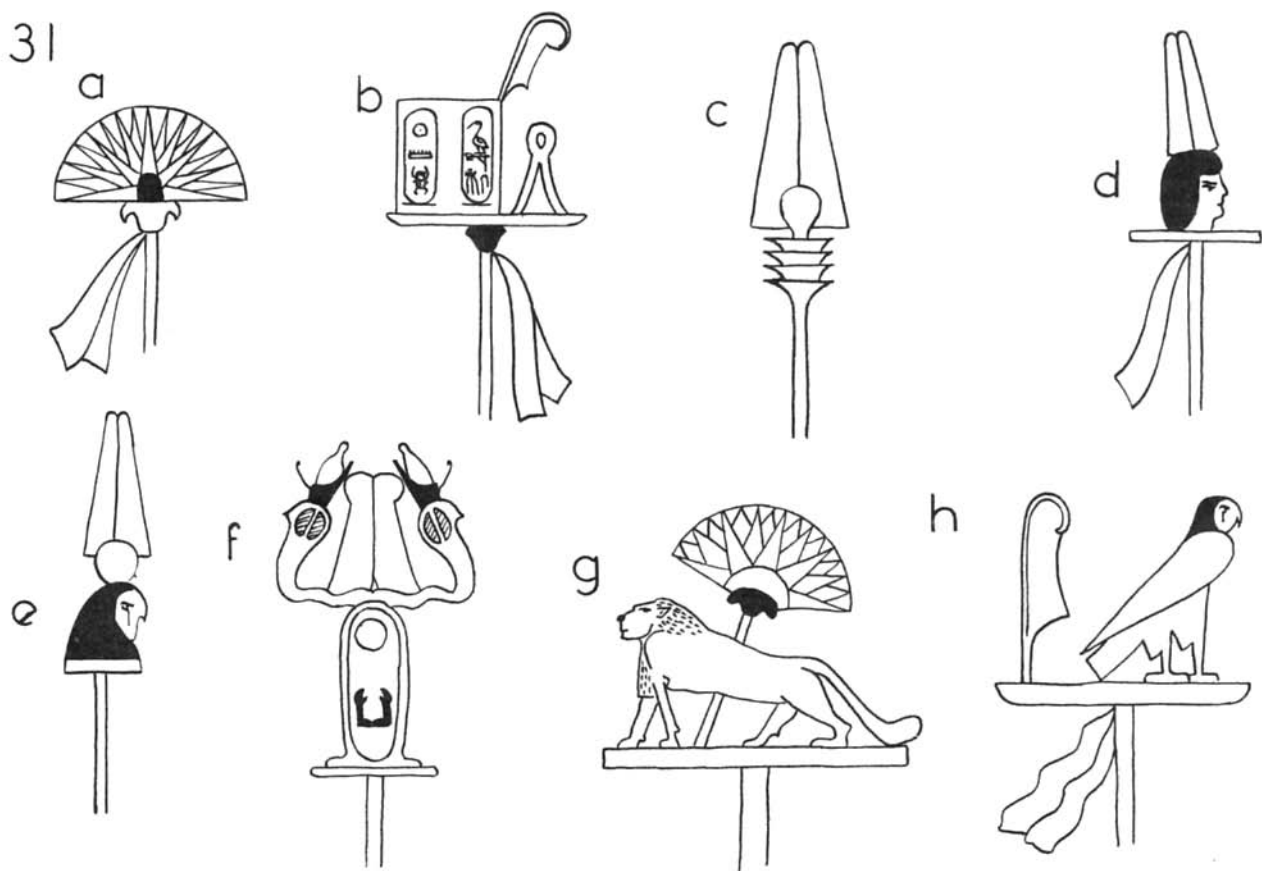
33. **Nubian Chief:** This man wears a long loincloth held in place by a wide cloth girdle, highly decorated as is the broad band crossing the body and passing over the shoulder. From the girdle hangs a leather lappit flanked by rows of beads. He also wears, as decoration, a bead necklace, metal arm-bands, gold bracelets, and panther tails tied to his arms. He also wears two feathers as a sign of rank.
34. **Nubian Archer:** This man wears a panther skin wrapped round his body, with the tail hanging free, and held in place by a broad belt.

He is armed with the characteristic double curved bow of Nubia which was a powerful weapon. Nubia (Kush) provided the Egyptian armies with auxiliary archery units from the earliest times.

35. **Nubian Infantryman:** This primitive looking warrior is armed only with a curved hardwood club and, for defence, carries a bull hide shield.

He wears a short, patterned, loincloth with a leather lappit in front, and a beaded necklace. Other Nubian infantry were armed with a spear in place of the club.

31



32



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35



36. **Nubian High Ranking Officer:** This man wears a white linen kilt held in place by a highly ornamented broad leather girdle. Over his shoulder is a leopard skin with the tail hanging down behind him. In his hair are two feathers and he also wears gold earrings and bracelets. He carries no shield but is armed with a spear and hardwood club.

37. **Kharu Auxiliary:** These men, from Palestine, wore a long, loose, robe of wool which extended to the ankles, had ample sleeves, and had a broad girdle.

They had a large beard and wore a skull cap which was terminated by a band falling down behind and ending in a tassel.

The weapons carried were a composite bow and either a spear, or two javelins. The double belt crossing each shoulder bears a resemblance to the later Assyrian dress.

38. **Amorite Spearman:** The area which was later to be called Palestine was divided into Amor in the North and Canaan in the South. This Northerner wears the characteristic head fillet with a bow at the back. His woollen loincloth reaches almost to the knee, is highly patterned and decorated with acorns, and is held up by a broad belt.

He is armed with spear and dagger but could, alternatively, be an archer.

39. **Temehu Libyan:** These men wore ostrich feathers and had a long tress of hair hanging down to the shoulder. Over the loincloth they wore a long open garment fastened at the shoulder, highly decorated, and with only one sleeve.

They were mostly spearmen.

40. **Tehenu Libyan:** This Libyan tribe from further West were tall and muscular with a thick head of hair falling down the back and on to the chest, and had a plaited beard.

They wore material bands crossing the chest and necklaces and pendants. From the decorated belt hung a phallus sheath of leather as well as protectors for the hips and rear. An animal tail was suspended from the back of the belt.

41. **Hittite Chariot Warrior:** The characteristic Hittite tunic was short sleeved with patterned bands at the sleeves and neck. It reached to the knees, and was of wool or linen which was dyed various colours and ornamented with a fringe. In the leather waist belt, studded with metal, was carried a curved dagger with crescent pommel. The high boots with pointed toes were probably of leather and were really snow shoes.

The warrior wears a leather helmet, with a form of vizor, which is curled up at the nape of the neck. He has the Hittite pigtail and square cut beard. In addition to the bow and arrows, a spear was carried in the chariot for the close fighting. Most chariotment, however, were armed with spears only.

42. **Hittite Axeman:** This infantryman wears the lofty tiara of felt or leather, with a turned-up brim, which was either pointed or rounded in the "sugar loaf" shape as shown. A long dagger or sword is carried in the belt. The tunic is almost the same as Fig. 41, and he carries the Hittite double headed axe. This must have been a formidable weapon and was probably wielded by both hands. He wears large earrings and a square cut beard.

43. **Hittite Guardsman:** The metal, or probably leather, helmet has ear pieces and an extended piece to cover the nape of the neck. A reinforcing bar on the summit holds a plume, possible of horsehair, which hangs down the back. This man wears no tunic but a highly decorated kilt held by a broad studded belt.

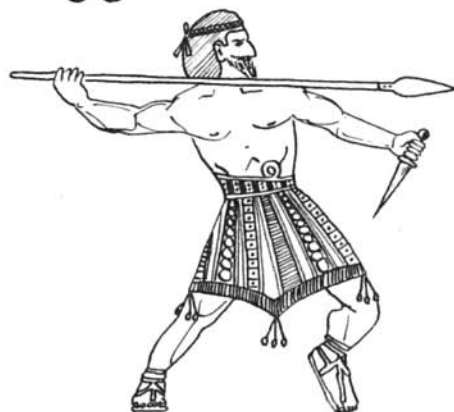
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43



For protection he has a shield of the figure — of — eight type made of wood with a reinforcing band of either leather or metal round the edge. The unique axe was shaped like a human hand and the cutting edge was almost circular. This figure, taken from the King's Gate at Hattusas, could represent a member of the Lulakhkhi or Khabiri who were the bodyguard of the King.

44. **Hittite Spearman:** This light infantryman, from the Egyptian battle reliefs, is clean shaven and wears a long striped garment with short sleeves. This was probably quilted but no use as armour. His head-dress, extending down the back, with a separate front piece, was probably of leather like Fig. 41.

He carries a long spear with reinforcing midrib and is protected by a square wicker shield.

NEW KINGDOM (20th DYNASTY)

45. **Pharaoh Rameses III:** The King in war costume always wore the khepresh, in this case ornamented with golden discs sewn on. He wore a corselet of red leather in the form of protective wings and a broad collar of gold and semi-precious stones. The shendyt kilt was either of pleated white linen or some gilded material. The ornamental belt had a lion's tail suspended from the back and a decorated leather lappit hanging from the front.

The Pharaoh always fought from a chariot and carried a bow in addition to the khepesh or axe. He would not wear sandals when riding in the chariot.

46. **Egyptian Light Archer:** By the time of Rameses III, the triangular bow was in general use and the heart-shaped lappit of leather or stiffened linen was re-introduced. The infantryman shown wears a short sleeved linen hauberk and carries an eye axe for hand to hand fighting. The cut leather over-kilt with reinforced mesh seat patch was for protection of the linen kilt and was usually used by naval personnel and horsemen.
47. **Marine:** Both oarsmen and marines were part of the army and could be detailed for service on land or sea. When rowing, they wore a loincloth made of leather net with a square patch of leather on the seat as protection against the rower's bench. This marine wears a horsehair or linen cuirass and a padded helmet of a type introduced by Rameses III. The kilt with a coloured border is unlike the conventional Egyptian type and was probably adopted from the Sea Peoples. In addition to the old Egyptian war bow the warrior carries a mace with hand guard.
48. **Guard Officer:** Over the linen hauberk, this man wears a decorated corselet probably of leather and provided with hollowed spaces for the arms. This type of corselet had no metal plates and was used as a substitute for the heavier one which was obviously not worn all the time.

The shield of painted wood, with a boss of bronze, is of a pattern carried by members of the Royal Guard. He is armed with a light axe as he is an officer, and wears a padded linen helmet.

49. **Retennu Spearman:** These men, from Eastern Syria, had white complexions and wore a closed cap bound with a characteristic type of fillet. The warrior shown wears an ornamental kilt over which was worn an ample woollen cloak over the whole dress. Alternatively, they dressed in a long garment with tight sleeves which was fastened at the neck by strings. It was either folded over in front or closed and sometimes secured by a girdle. Both types, however, wore long patterned gloves and fought from chariots with four-spoked wheels.
50. **Pelest Light Infantry:** The felt helmet is surmounted by a crest of feathers and is fastened under the chin by two straps. The feathers were fitted into an elaborately embroidered band which encircled the temples and had slight differences in decoration, (circles, notches, zigzags) according to units of a different tribe.

44



45



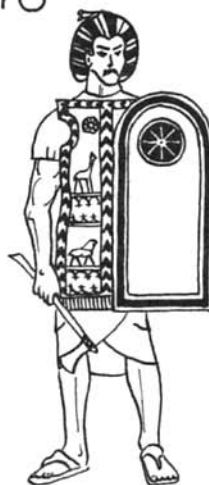
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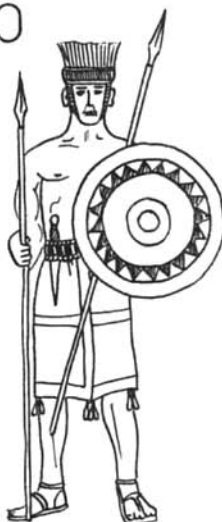
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51



51. **Peleset Medium Infantry:** All the Peleset wore the felt helmet with protective neck guard. Over his light linen tunic this warrior wears bands of leather or some other thick material. The pointed angle of these bands could be at the bottom or top, according to the tribe. In addition, he wears leather shoulder pieces for extra protection. The buckler was provided with two handles and the long bronze sword was carried by a belt passing over the left shoulder.

This sword was used for stabbing and not slashing. The Peleset either fought barefoot or wore short sandals. They were composed of several elements derived from Crete and the South West corner of Asia Minor.

52. **Weshwesh:** This warrior of the Sea Peoples wears a helmet similar to the Sherden (Fig. 30) with the exception of an extended piece to cover the nape of the neck. He wears a short sleeved garment, belted at the waist, and extending to the knee.

He carries the usual type of round shield ornamented with a geometric pattern and is armed with spear and wooden club.

(a) shows the Denyen head-dress which was similar to the Peleset except that it was taller and had no feathered crest. Also, unlike the Peleset helmet, the band had no ornamentation.

53. **Meshwesh Libyan:** These men wore their hair long to the nape of the neck, with a fringe on the forehead and a long plaited sidelock. They had a short pointed beard and wore feathers in the hair. Over the loincloth they wore a sleeveless coat which was open at the front to reveal tattooed arms and legs.

The weapon of the Meshwesh was the long bronze sword.

54. **Egyptian Chariot:** The chariot, greatly developed by the Aryans through military necessity in Northern India, was introduced into Egypt by the Hyksos, about 1600 B.C.

The rounded body rested on the bent wooden pole and was further secured by leather thongs from the top rail. The pole, inserted into the axle, served as a spring and, at the other end, carried a bow-shaped yoke of hornbeam. The light, six-spoked, wheels were set far back for weight distribution, were equipped with leather tyres, and were strengthened at the spoke joints with bronze bands. Quivers and javelin cases were lashed to the sides and were inclined backwards for easy access from the vehicle. The bow case was so placed that when the bow was withdrawn, the flap fell back down.

Royal chariots were highly decorated and covered in sheet gold and precious stones. The Pharaoh's chariot bore, on the pole, the Solar Hawk (a) which denoted the Royal house.

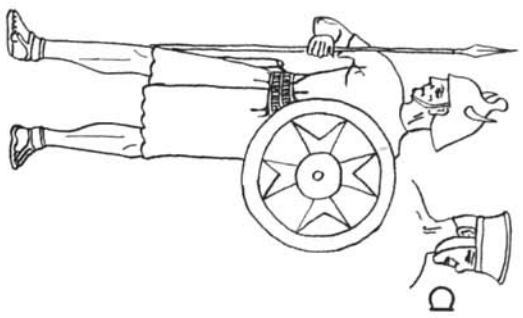
The Egyptians had modified the chariot, with lightness as the main object, and the weight and length had been reduced so that a man could carry one on his shoulders if need be.

Syrian chariots were very similar to the Egyptian model except that the wheels had only 4 spokes instead of 6.

55. **Hittite Chariot:** This was a sturdier vehicle than the Egyptian model and had smaller, heavier, wheels.

Two quivers were lashed crossways on the side of the chariot and both had flaps which could be fastened. The chariot warrior's spear is always shown pointing upwards and leaning back, at the rear of the vehicle. The bent pole was fixed to the body at the axle and further secured by an ornamental wooden strut stretching from the body front to the yoke. The free end of the pole was carved in the shape of a bird's head looking back. The small lion's head seen at the rear of the chariot was probably an emblem denoting the royal rank of the owner. It could, alternatively, be the boss of a shield placed at the rear.

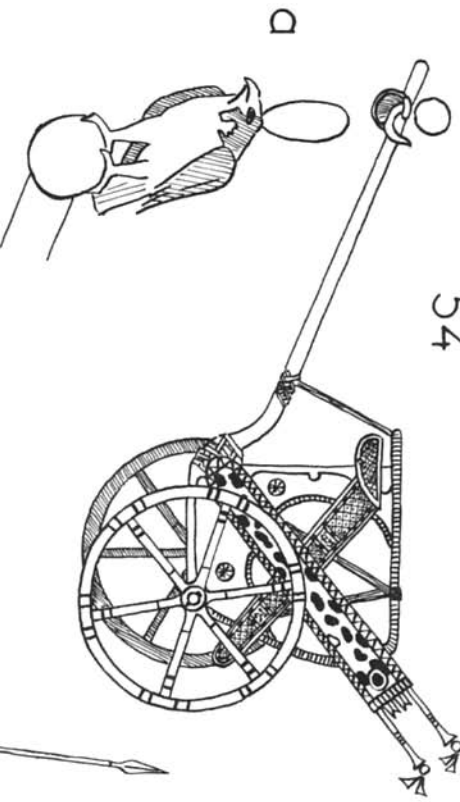
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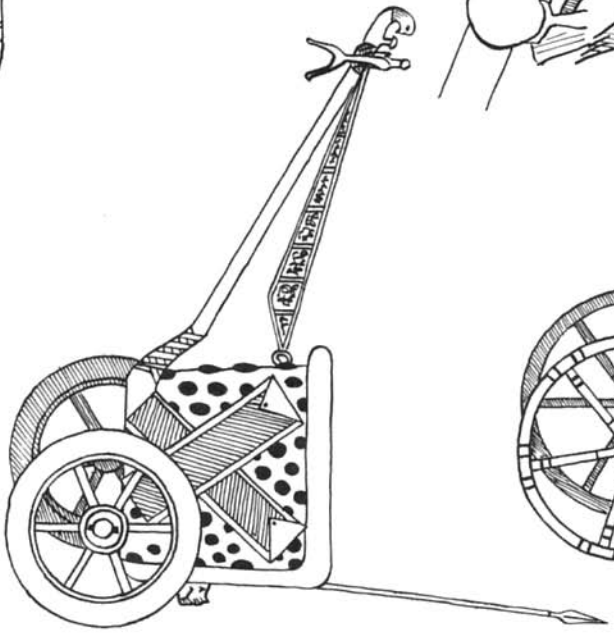
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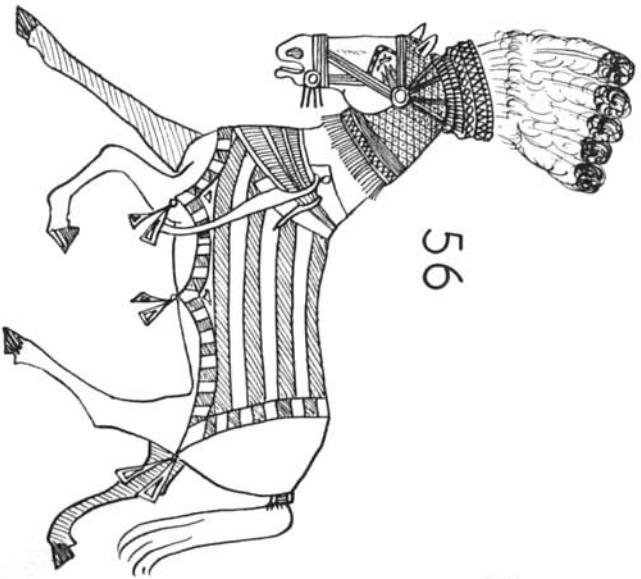
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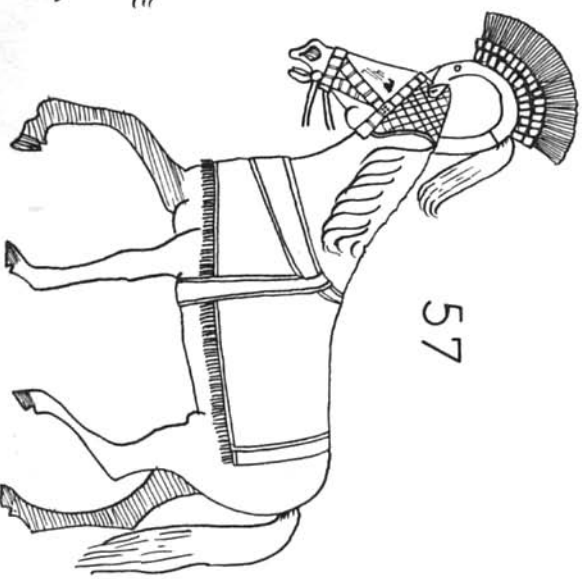
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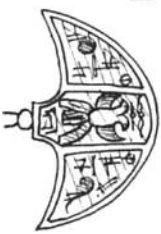
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(a) is a sickle-shaped standard of embossed sheet copper which supposedly provided symbolic protection for the driver and, at the same time, dazzled and frightened the enemy.

This type of chariot would have had a marked advantage over its Egyptian counterpart in the clash due to the extra weight and also the fact that it carried three men, whereas the Egyptian one only carried two.

Peleset chariots were very similar to the Hittite type with the exception of the ornamental crest.

56. **Egyptian Chariot Horse:** These horses were slender and sinewy animals with narrow hindquarters and a flowing tail. The "htar", or span of horses, used to pull a chariot was always white in the case of Royalty and high ranking officers, and were stallions wherever possible. Some of the line chariot horses wore a protective housing of linen, or leather in some cases, and also a padded housing to protect the head.

The harness mainly consisted of a broad breast band which was surmounted by a bronze knob which bore a small hook to secure the bearing rein. A thinner strap passed under the body and was secured to the breast band. Spur shaped goads were attached to the breast harness to prevent the horses from breaking the line of draught. Egyptian horses wore blinkers which were engraved with the god Sutekh. In most cases, harness and leatherwork were purple in colour. Line chariot horses sometimes had rosettes fixed to the bridle or simply a spray of artificial flowers.

Royal horses bore a golden crest on the head housing which held ostrich feathers carried only by the ruling house. The body housing of the Pharaoh's chariot horses was highly decorated and bore tassels and the harness was decorated with golden plaques.

57. **Hittite Chariot Horse:** The Hittite chariot horses were similar in appearance to their Egyptian counterparts. Some of them were equipped with a body covering which was probably also of quilted linen and possibly leather in the case of Royalty. This housing bore a fringe which was characteristic of Hittite dress and was possibly of a single colour with a border of a different colour. The protective housing for the head was somewhat smaller than the Egyptian one and was probably of quilted linen or leather.

The high ornamental trapping, on the head, was of metal, very likely gilded, and bore a crest of feathers or horsehair with a tailpiece similar to the one seen on Greek helmets. As in the Egyptian case, these elaborate crests were probably only worn by Royalty and possibly high ranking officers. Line chariot horses could have borne a crest of simpler design or, more likely, none at all.

The harness, with the exception of blinkers, was very similar to the Egyptian type although it appears to have been simpler in design.

THE ASSYRIANS AND THEIR ENEMIES, 1,300 B.C. TO 612 B.C.

MAJOR BATTLES OF THE PERIOD

Assyrian history is the story of a succession of battles and campaigns and is the account of military expansion over a period of some 500 years to the final destruction of Nineveh.

The details for the following battles were all recorded in the annals of the various Kings. Many of these accounts are untrustworthy as they were obviously biased in favour of the Assyrians, as were the totals of enemy slain etc. I have written these as they appear originally and have verified the dates, as far as possible, by means of the Cambridge Ancient History. In the instances where there is any doubt, I have placed an asterisk immediately after the date in question.

Battles up to the New Assyrian Empire

Mitanni (1272 B.C.)

Shalmaneser I, with an Assyrian army, attacked the Hittite King, Shattuara, who was allied with the Arameans. The enemy succeeded in cutting off the water supply to the Assyrians but were beaten in a battle in which they lost many men and had 14,400 taken prisoner.

The Assyrians, now masters of Hittite country, had laid waste a total of 180 cities from Taidi to Carchemish.

Babylon (1249 B.C.)

Tukulti-Ninurta I fought the forces of the Kassite King, Kashtiliash, at Babylon in a great battle. The Kassites were beaten and their King was captured and taken to Assyria.

The victorious Assyrian King then faced the situation of ruling a hostile country and, at the same time, respecting it as the motherland of his own culture.

Kutmuhi (1100 B.C.)*

Tiglath-Pileser I campaigned against the Mushki (Meshech of Genesis) who were allied with the land of Kutmuhi (Commagene). This was the aftermath of the repulse of the Sea Peoples by Rameses III of Egypt.

This force of 20,000 men, led by 5 Kings, was defeated by the Assyrians in Kutmuhi and 6,000 were taken prisoner. Some escaped to the stronghold of Shereshe, on the banks of the Tigris, but this city fell to the Assyrians who had to hew their way through the mountains before they could take the stronghold.

Tala Mountains (1095 B.C.)*

Tiglath-Pileser I fought the Kumanians, who had an army of about 20,000 men, and defeated them in a battle in the Tala mountains. The Assyrians completely destroyed the capital city of Hanusa, burnt it to the ground, and said that it was never to be built again.

Tumme (884 B.C.)

King Ashurnasirpal II overhauled the military system and developed a new army with which he invaded the land of Tumme and captured 7 cities including the fortified ones Libe, Aruni, and Etini.

Large numbers of the enemy were killed but some escaped to a mountain top. After 3 days search, the Assyrians located them and killed 200.

Kirhi (884 B.C.)

A revolt, promoted by the Nairi tribes supported by some Assyrian traitors, broke out in the Kirhi district between the upper Tigris and Lake Van.

Ashurnasirpal II marched against them whereupon they fled into the mountains and were pursued by the Assyrian army. An action was fought near the city of Nishtun and 260 of the enemy were killed. The Governor of the city, Buba, was flayed and his skin spread upon the wall of the city of Arbela.

Kinabu and Tela (883 B.C.)*

Ashurnasirpal II invaded the Kashiari hill area, N.W. of Assyria, and captured the stronghold of Kinabu. The Assyrians killed 600 men and burned 3,000 prisoners alive. After capturing Mariru, where 50 were killed and 200 burned alive, the Assyrians marched to Tela which was well fortified and surrounded by 3 walls.

The city was taken by storm and 3,000 were killed, many taken prisoner, and many more either burned alive or mutilated by the Assyrians.

Babite Pass (881 B.C.)

Nur-Adad, Prince of Dagara, had revolted and, allied with men from the land of Zamua (E. of the Tigris), had built a wall across the Babite pass (the modern Derbend-i-Bazian) and challenged the Assyrians to battle. Ashurnasirpal II was victorious and 1,460 of the enemy were killed in the pass and, after going on to capture their cities, 12,000 of them were taken prisoner.

Most of the prisoners taken by Ashurnasirpal were drafted back to his H.Q. at Kalkhi (Nimrud) and were incorporated into the Assyrian army.

Ammali (881 B.C.)

In the course of his third campaign, Ashurnasirpal II was in the land of Zamua. The Assyrian army marched through the night in order to attack the city of Ammali at dawn.

They took it by storm, killed 800 men, and took many prisoners and then marched on to Parsindi. At this city, the Assyrian King kept the cavalry and pioneers in reserve and killed 50 of the enemy. 20 of the prisoners were buried alive in the city walls.

Pitura (880 B.C.)*

The Assyrian army of Ashurnasirpal II crossed the Tigris in order to campaign against the Kutmuhi. The first action was fought at Matiati where 2,800 were killed. They then marched all night to the city of Pitura which was the capital of Dirra.

The city, protected by 2 walls, took two days to capture but eventually it fell to the Assyrians and 800 of the enemy were killed. Of the captured, some were burned alive and, 700 were impaled on stakes outside the gates of the city.

Suru (879 B.C.)

Travelling down the Euphrates, Ashurnasirpal II attacked the city of Suru, which was governed by Kudurru who was allied with the Kassites.

The Assyrian army stormed the city and then fought inside the city walls for 2 days before victory was theirs. Kudurru, with 70 of his men, escaped but drowned himself in the Euphrates. The Assyrians took 50 cavalymen of the city and 3,000 Kassite soldiers.

Lake and Suhi (879 B.C.)*

The Assyrian army crossed the Tigris and marched overland to the desert city of Suhi to build ships in order to sail down the river. This was to transport the army for a campaign against the lands of Lake and Suhi.

At the city of Hindanu they were opposed by a force of infantry, cavalry, and chariots to the number of 20,000. The Assyrians were victorious, succeeded in killing 6,500 men, and sent many to die of thirst in the desert.

At the city of Kipina 1,000 men were killed and their chariots destroyed.

Kapabri (877 B.C.)

Ashurnasirpal II marched his army on into the land of the Bit-Adini and fought a battle at the city of Kapabri (probably Edessa).

They stormed the stronghold with rams and killed 800 of the enemy. 2,400 captured men were transported back to Kalkhi and then Kapabri was burnt to the ground.

Damdammusa and Uda (867 B.C.)

Campaigning in Zamania, the Assyrians captured the city of Damdamusa. They killed 600 fighting men and took another 400 prisoners, 3,000 other prisoners were later impaled.

From there, Ashurnasirpal II marched to the city of Uda which was taken by storm. 1,400 enemy soldiers were killed, 580 captured, and 3,000 were taken prisoner.

Arzashkun (856 B.C.)

The Assyrian army of Shalmaneser III crossed the Euphrates to campaign in Urartu (Armenia). They attacked the forces of the Haldian King, Arame, at the gates of the royal city of Arzashkun which lay on a rocky plateau to the north of Lake Van.

The Haldian infantry, in desperation, even bodily attacked the Assyrian cavalry and chariot horses, as a final attempt at repulsion but were beaten back. The advancing Assyrians breached the gates and set fire to the city. A portion of the enemy forces, however, fled and were pursued up Mount Adduri where another action ensued. The forces of Shalmaneser were victorious and killed 3,400 of the enemy and also captured their camp.

Karkar (853 B.C.)

Shalmaneser III, with an Assyrian army of some 120,000, sacked the frontier cities of Irhuleni on his advance north. The city of Parga, which had high battlemented towers and was situated on an artificial mound, was captured by means of the rams, following a battle outside the city walls.

The Assyrians then advanced up the Orontes valley to the city of Karkar, a battlemented city which, although quite small, protected Hamath from direct attack.

It was here that they met the combined forces of the Aramean Syrians led by King Ben-Hadad II of Damascus. He was allied with the King of Hamath, the Kings of the S. Hittites, and those of the Phoenecian coastal cities. The real power behind the alliance, however, was Egypt who supplied a contingent of infantry.

The enemy forces totalled 63,000 infantry, 2,000 cavalry, 4,000 chariots, and 1,000 camels, of which Ben-Hadad II provided 20,000 men and 1,200 chariots.

In the battle the Assyrians were victorious, killed 14,000 of the enemy, and captured the chariots and equipment. Assyrian losses were also heavy, a fact which caused them to abandon the campaign subsequently.

Mount Hermon (841 B.C.)

The Assyrian army marched south from Aleppo and met the forces of Damascus, led by King Hazael, in the mountain range which separated their territory from Hamath. The army of Hazael fought the Assyrian forces in the region of Mount Hermon (Mount Saniru).

The forces of Shalmaneser III were victorious and killed 16,000 enemy soldiers, captured 1,121 chariots, and also took 470 cavalry in addition to the enemy camp. The enemy King fled to the city of Damascus which the Assyrians besieged but did not capture as it proved impregnable to outward assault and Shalmaneser had not the patience to engage in a siege. They went on to capture and burn other cities in the area of the Hauran mountains which was the granary of Syria.

Urash (821 B.C.)

The Assyrian army, led by King Shamshi-Adad V, attacked the city of Urash in the land of Gizilbunda. The storming of the city was successful and 6,000 of the enemy were killed, 1,200 soldiers captured, and also the King, Pirishati.

They went on to subdue the Medes and Nairi tribes and, in one particular action, killed 2,300 men and captured 140 cavalry of the Median King Hanisiruka.

Dur-Papsukal (818 B.C.)

Shamshi-Adad V then turned his attention to Babylonia and met the first strong force of Babylonian allies at Dur-Papsukal in Akkad: the city was situated on an island in the middle of a stream. The Assyrians were victorious, killed 13,000 of the enemy and captured 3,000, and burnt the city to the ground.

The second action took place nearby on the banks of the Daban canal.

The Assyrians were opposed by a mixed force of Babylonians, Chaldeans and Elamites, led by the Babylonian King Marduk-balatsu-ikbi. Shamshi-Adad V's army was victorious in the fierce battle and killed 5,000 men and took 200 cavalry and 100 chariots. They captured the Babylonian camp which contained the Royal standard and pavilion.

Battles of the New Assyrian Empire

Kumukh (744 B.C.)

Tiglath-Pileser III fought the Urartu, led by King Sarduris, at Kumukh which was situated in the hills in the N.W. corner of Mesopotamia. The battle was actually fought between the Khalpi and Kishtan districts of Kumukh (Commagene) in the region of the Sinzi canal. The forces of Sarduris were allied with those of the independent N.Syrian princes.

The Urartians were beaten and over 70,000 were killed or taken prisoner. The two Kings fought in single combat but the Urartian leapt from his chariot and escaped on horseback. He was pursued by Assyrian cavalry and managed to escape but the enemy camp, with its horses and stores, fell to the forces of Tiglath-Pileser III.

Dur-Illatia (731 B.C.)

Tiglath-Pileser III attacked the Chaldean city of Sarrabani which was captured by means of a siege. The city was then burned to the ground and 55,000 prisoners were taken.

From Sarrabani, the Assyrian army marched to the land of Bit-Sha'ali and captured the city of Dur Illatai by means of tunnels (?) and siege engines. 50,400 people were captured and deported and the city was levelled to the ground.

Tiglath-Pileser III, whose reign had been dominated by military considerations, had extended the Assyrian Empire from Cappadocia to Egypt, crushed all Urartian resistance, and brought Assyria into close friendliness with Babylonia.

Tyre (725 B.C.)

At the death of Tiglath-Pileser III, several vassal states revolted including the Phoenicians, Philistines, and the Israelites.

With a fleet of 60 vessels, Shalmaneser V sailed from Sidon, Akka, and Palae-Tyrus to attack the Phoenician city of Tyre. The Assyrian ships carried a total of 1,200 men of which 800 were Phoenician oarsmen.

The Tyrian fleet, although only composed of 12 vessels, proved far superior to the Assyrians who were driven off and lost 500 men captured. However, the Assyrian land forces then besieged Tyre and cut off the water supply. The city wells provided sufficient for the needs of the inhabitants and the siege, which lasted for 5 years, resulted in failure and Shalmaneser eventually made a treaty with Tyre.

Carchemish (718 B.C.)*

Sargon II marched on Carchemish as the result of a revolt led by King Pisiris. The city fell to the Assyrians before the allies of Pisiris could give him any assistance and 50 chariots, 200 horses (or cavalry), and 300 infantry were taken. A large proportion of the inhabitants were deported and settled in an Assyrian province. In addition to this, the whole body of captured troops were incorporated into the ranks of the army of Sargon II.

Musasir (714 B.C.)

Sargon II went on to defeat King Ursa of Urartu's forces but the King himself escaped on horseback. Many of his people were killed and a unit of 260 cavalry, formed from blood relations of the Royal House, was captured by the Assyrians.

King Urzana of Musasir, which was also in Urartu and was a mountainous district S.E. of the Upper Zab, revolted against the Assyrians. Sargon II, with 1,000 cavalry "rough riders", and some infantry spearmen, crossed the difficult mountain routes and besieged the city.

Musasir fell after a siege and 6,170 people were captured by the Assyrians, in addition to a vast amount of treasure.

Babylon (710 B.C.)

Merodach-Baladan, King of Babylonia, allied with Elam and the Sutu desert tribes, defied Assyria. He had ruled Babylon for 12 years and had protected the city from the Assyrians with a look-out force of 600 cavalry and 4,000 picked infantry.

He had the city walls built higher but Sargon II's army captured it in a day and took 16,490 prisoners. Merodach-Baladan escaped to oppose the Assyrians again in 4 years time.

The victorious forces of Sargon II then marched on to Lake and took, by storm, the cities of Samuna and Bab-Duri, where they captured the commanders plus 7,500 Elamites and another 12,062 people.

Kutha (706 B.C.)

Merodach-Baladan again seized the throne of Babylon and allied himself with the Arameans and Elamites. The Elamite contingent consisted of King Shutur-Nahundu, Imbappa his Turtan, Tannanu the 2 i/c, 10 div. commanders, 80,000 bowmen, and some cavalry. These forces, with the cavalry and infantry of the Arameans and Babylonians, held the Plain of Kish near the city of Kutha. This fortified stronghold was guarded by tall battlements with stage towers and had 5 square gates.

In the ensuing battle, the Assyrians were victorious and then, led by King Sennacherib, they marched on to Babylon which was captured.

They now owned all the Chaldean cities and returned to Assyria with 208,000 prisoners and 7,200 horses.

Eltekeh (700 B.C.)

In his 3rd campaign, Sennacherib fought in Syria-Palestine. Hezekiah the Jewish King was allied with Egyptian, Ethiopian, and Arabian forces. They met in battle near Eltekeh, where the Assyrians were successful and captured the Egyptian and Ethiopian contingents alive. These included the leader of the Egyptian chariotry, various Egyptian princes, and the commander of Pharaoh Shabaka's chariotry, in addition to the Arab mercenaries whom Hezekiah had hired to reinforce the troops in the city.

Sennacherib, with an army of 185,000 then went on to capture 46 cities in Judah and transported 200,150 people back to Assyria, in addition to 10,000 bows and the same number of shields.

King Hezekiah, however, was hiding in Jerusalem which was not taken. This was probably due to his buying off the Assyrians although his picked troops deserted the city.

Lachish (699 B.C.)

The Jewish King, Hezekiah, allied with the Egyptians, had once more revolted and opposed the Assyrians at Lachish. The city was situated on a 100' hill by the side of a dry river bed about 35 miles S.W. of Jerusalem. The city was the fifth on the site and was protected on the north side by a huge barracks with indented outer walls.

Sennacherib's forces besieged the city and, at the same time, sent a detachment of troops, under the Turtan, to ask Jerusalem to surrender. The Jews asked for terms but were informed that the surrender must be unconditional.

At Lachish, olive and palm groves had been cut down to provide the ten banks by which the rams could approach the walls. After a fierce battle, the city was captured whilst Sennacherib watched from a raised mound nearby.

Khalule (690 B.C.)

The King of Elam, allied with the Arameans and Chaldeans, fought the army of Sennacherib in the plain of the city of Khalule which was situated on the left bank of the river Diyala.

The enemy were beaten with 150,000 soldiers killed and their commanders pursued and killed by the Assyrian cavalry.

Babylon (689 B.C.)

Elam, crippled by raids from the soldiers of Parsua (Persia), was unable to support the Chaldean King of Babylon, Mushezib-Merodach.

Sennacherib captured Babylon and despatched the King to Nineveh.

The Assyrians completely destroyed the city and, for several days, looted the temples and houses and slaughtered the inhabitants without mercy.

Memphis (667 B.C.)

Pharaoh Taharka of Egypt revolted against Assyrian rule, marched north from Ethiopia, and took Memphis. Esarhaddon, the Assyrian King, died on the advance to Egypt and was succeeded by Ashurbanipal who marched from Nineveh and collected the allied forces of 22 Kings along the way.

This Assyrian army defeated an advance force of Egyptians in an open battle just below Memphis. Taharka was driven back up river to Thebes but died in 663 B.C. and was succeeded by Tanutamen who fortified Thebes and Heliopolis.

Thebes (663 B.C.)

Tanutamen marched north from Thebes, with a strong army, and captured Memphis. Once more, Ashurbanipal's forces marched against the Egyptians and drove them back to Thebes which was besieged and subsequently captured by the Assyrians. The city was sacked, its nobles killed or taken prisoner, and was never again to recover its prestige.

Babylon (648 B.C.)

After campaigning in Elam and Gambulu, Ashurbanipal marched against the Babylonian King, Shamash-shum-ukin, who was allied with the Akkadians, Chaldeans and Arameans to revolt.

The Assyrian armies swept through Babylonia, surrounding and capturing each city including Sippar and Borsippa. Those who escaped died from hunger and plague, and famine struck Akkad, resulting in cannibalism for which Shamash-shum-ukin was blamed.

Babylon was besieged by Ashurbanipal for 3 years and was eventually starved into submission. When the Assyrians captured the city, Shamash-shum-ukin locked himself and his family in his palace, set fire to it, and was thus burned alive. Some Babylonians attempted to change sides by throwing themselves on the mercy of the Assyrians: they were deported to Ashur (Kalah Shergat) where their tongues were torn out before they were killed. The squares and streets of the city were piled high with the bodies of the slain and of those who had died of hunger and pestilence during the siege.

Nineveh (612 B.C.)

Cyaxares, King of Media, allied with the Susianians, Babylonians, Persians, and some Arabians, invaded Assyria with an army of 400,000 men. The Assyrian King, Sin-Shar-Ishkun, split his forces and sent part of the army, commanded by Nabopolassar, to meet the enemy at Babylon. Nabopolassar, however, changed sides and joined up with the invading force which was led by the King of Media.

An action was fought at Kablini where the Assyrian force was defeated and many prisoners taken. Another battle, at Arrapha, resulted in victory for the Akkadians and the Assyrians were driven into the river.

The forces of Sin-Shar-Ishkun were finally defeated, in a night attack on the Assyrian camp, by the combined enemy forces further strengthened by reinforcements from Bacteria. The Assyrian King fell back to Nineveh leaving the army, under the command of Salaemenes, to be defeated.

The Medes directed their main attack on Nineveh from the N.E. The main brunt of the action took place at the Hatamti gate at that corner. The city was besieged and fell in the third year but the enemy did not know that, already, Media had been overrun by the Scythian hordes.

The palaces and temples of Nineveh were destroyed by fire and the Assyrian nobles were slaughtered by the victorious forces.

With the fall of Nineveh, Assyria was completely overthrown and never again regained her former greatness.

TACTICS

Assyrian

There are no detailed records of open battles so the strategy and tactics cannot be determined.

It is quite clear, however, that chariots provided the initial principal power and strength in open battle although they were of limited value, economically, because the actual fighting man required a driver and one, or even two, shield bearers. These chariots probably charged the enemy from all directions and engaged in battle at all ranges in a similar manner to that of other nations who used chariots. Due to the rigid construction, the chariot could not, however, change direction sharply, and the counter move was simply to attempt to sidestep the vehicle if possible, which would then go past. These heavily constructed Assyrian vehicles would, however, have had a devastating effect in direct charges on to the enemy infantry ranks. The shock of such a massed attack would have been great.

After the chariotry had caused confusion, the other troops would move in to attack what was left of the enemy. The chariotry would then either leave the melee to reform in order to charge again or would participate in mopping up operations along with the cavalry archers who operated near the chariots in teams of two.

The cavalry spearmen led the attack and were followed by the infantry spearmen who were the shock troops, clad in heavy armour. They played a decisive part in open battle as well as in hilly and wooded terrain and particularly in the attack on fortified cities.

The main power lay with the archery units, light and heavy, who were used in all types of attack. Slingers operated in pairs behind the archers and provided high angled fire at, and over, the walls.

Mounted archers attacked mostly from the rear or flanks to prevent the enemy from escaping.

In battles in wooded and hilly regions, the spearmen and mounted archers played the chief part. They advanced in column with their flanks protected by the infantry in open order.

The Assyrians were good fighters in all types of terrain and could, usually, easily defeat any opponent. This led to siege warfare as their enemies took to the safety of fortified cities in order to escape as they stood no chance in open battle.

Originally, large battering rams were employed in an attempt to breach the walls of these strongholds. The focal point of assault was the wooden gates as they were the weakest part of the defences.

These early rams were tall and did not require ramps but were simply wheeled into position by a team of men or horses. The actual ram itself was a long heavy beam slung under the superstructure and swung back and forward. Above the ram was a turret through which the crew could observe the progress of their operations as well as being able to fire on the enemy. This turret could also have contained the officer in charge of the operation. The main protection for the ram, however, was in the form of a high tower which contained archers. They could fire directly at the enemy as they would have been more or less on a level with them at the wall.

The early ram was later replaced by a much smaller one which was long and low with a pointed bronze head. This type was used in attempts to attack the base of the walls to gain entrance.

These, in turn, were replaced by spear headed types which were more along the lines of the first type. They were pushed up specially constructed ramps in order to attack the top of the walls and the wooden battlements.

In addition to the rams, individual men in long mail coats attempted to undermine the walls with spears and special sharp headed levers. They carried shields on their backs as protection.

At the same time, the walls were assaulted by spearmen who used scaling ladders to reach the top of the walls in order to draw the defenders away from the rams. They could also take advantage of any weak point left undefended whilst the enemy were busy dealing with the rams elsewhere.

All these methods were carried out simultaneously with covering fire from the archery and slinger units on the ground. The slingers were particularly useful in providing high angled fire over the walls whilst the archers fired at the defenders on the walls.

By the time of Ashurbanipal, walls had increased in thickness to an extent where rams were ineffective. To attempt a breach, scaling ladders, some of them over 30' long, were used. More reliance was then placed on the sappers who attempted to undermine the walls to gain entrance for an assault. They first dug, under protection, a large excavation under the wall or tower and shored the walls up, as they worked, with timber scaffolding. They then set fire to the framework and, when it had burnt, the wall collapsed into the cavity.

Arameans (Syrians)

The mounted infantry of the early Aramean armies were capable of equalling the Assyrian forces of the time in open battle. The Assyrian armies, containing infantry and heavy unwieldy chariots, would have posed no real problem for the Aramean horsemen who could move faster and manoeuvre more easily.

However, the situation changed when the Assyrians employed cavalry (originally mounted infantry). This, in addition to improved arms and armour, gave them more striking power and manoeuvrability and made them capable of defeating the Arameans' foot and mounted forces.

This, added to the fact that the Assyrians were good fighters, led their enemies to take to the supposed safety of fortified strongholds.

Tactics now employed by the enemies of Assyria were primarily defensive.

The defenders of such a stronghold attempted to keep the Assyrians out by missile fire from the walls and also employed methods designed to render the siege engines ineffective.

One method was to attempt to smash the superstructure of the battering ram by dropping large rocks and other missiles on to it from above.

Another way of destroying the rams was by fire. Blazing tow and torches were dropped on to the wicker, or leather, covered engines in order to do this. To counteract this, the Assyrians, in some cases, covered the ram surface with woollen hides which would not burn, or they used water to extinguish the flames.

The early rams had flexible leather hoses on the top, connected to a water supply tank, which could be directed to any part of the machine. Later editions had a man equipped with buckets and a long handled ladle to deal with the flames.

The third way of rendering siege engines inoperable was done by lowering chains in an attempt to engage the ram head to prevent it acting. The Assyrians simply used grappling hooks which they engaged in the chain links and then swung on them bodily to free them from the defenders' hands.

The defenders augmented these operations with missile fire as a cover to their efforts. These men on top of the walls, behind battlements, had also to deal with scaling ladders at the same time, and Assyrian archers in the high ram towers who would be on a level with them.

In addition to all this they also had to try to stop pioneers working at the wall base. This would have been extremely difficult as they were heavily protected by armour and worked under cover of great shields.

Babylonians

The Babylonians employed cavalry as the superior arm of armies composed of infantry, cavalry, and chariots, and used them to great effect in their early conquests.

They did fight open battles but, in most cases, the enemy sought the safety of a stronghold and a siege took place. Babylonian siege tactics were similar to those of Assyria in most respects as they used battering rams etc.

When serving in the army of Xerxes, the Babylonians were employed as infantry as they were obviously not as good as the Persian cavalry. At this late period, they dressed very similar to the Assyrians and used the bow as their favourite weapon.

Uartians

The Uartians fought in a similar manner to the Assyrians and Babylonians in that infantry, cavalry, and chariotry forces all took part in open battle initially. The Assyrians usually had the edge on them in battles of this sort which forced the Uartians to either flee to the safety of the mountains or a nearby fortified stronghold.

Although the strongholds usually fell after a siege, the Uartians were apparently a thorn in Assyria's side for many years.

Medes

Originally the Medes, like the Scythians, were mounted archers and were trained in the various skills required from an early age.

They fought similar to the Scythian fashion inasmuch as the army was a large confused mass of mounted men.

In actual battle, though, the fighting methods were slightly different. They were capable of firing whilst advancing, manoeuvring, or retreating; a feat which inspired terror into their enemies as they possessed great skill with the bow.

The method of firing whilst retreating, used by the early Medes, was later to become known as the "Parthian shot". This entailed galloping away from the enemy and then, turning round in the saddle, discharging a hail of arrows on the pursuers' front.

Scythians

The Scythians, a very bloodthirsty people by all accounts, were almost exclusively a nation of mounted archers. They wore, in some cases, breast plates of bronze, and fired arrows with bronze heads.

They fought in groups of a triangular shape which, when massed together in no apparent order, formed a gigantic, confused, mounted horde.

The actual method of attack was a form of skirmishing whereby they fired arrows from a distance and very rarely got involved in hand to hand fighting. If they were counterattacked, they simply retreated to a safe distance and then attacked again in the manner mentioned.

It was, therefore, not possible to strike an effective blow against their forces and they eventually discouraged the enemy in addition to tiring him out.

Their cavalry tactics were no good, however, against mountain regions, forests, and walled strongholds.

ORGANISATION AND FORMATIONS

Assyria

The Assyrians became powerful by developing the science of warfare and owed their success, mainly, to a combination of hardiness and bravery, and proved themselves more proficient on the battlefield than their more uncivilised neighbours.

Estimates as to the size of the Assyrian armies in the field are given as being in the order of from 100,000 to 200,000 men. These sizes varied at different periods. Temen-Bar, in the campaign of his 14th year, raised an army of 120,000, whilst Shalmaneser III fought the battle of Karkar also with a force of some 120,000 men. Sennacherib destroyed Jerusalem with an army of 185,000 men.

The efficiency of these armies was augmented by the existence of an intelligence network which was operated by the Assyrian provincial Governors and Magistrates. These men of position were all engaged in the gathering of military information.

In the early days, there was no national army and, in the event of an emergency, the whole available force of citizens would be called out for service. Governors retained their own forces which might be required for small local wars, or as a contribution to the King's military exploits, along with those of client princes. Peasants were always liable for military service all through the history of Assyria, but probably did this without too much grumbling as it offered respite from agricultural toil and also promised booty.

However, as the State grew in size, the authorities could not spare the large numbers required for the armies as it would have been detrimental to trade and agriculture and, hence, the economy. In order to avoid this, and also as a guard against internal revolt, a standing army was needed and this began during the reign of Tiglath-Pileser III. Ashurnasirpal II had redeveloped the armed forces to some extent and had added cavalry units, formed from allies, which by now were an important arm.

It was Sargon II, however, who was responsible for a thorough re-organisation, and brought the Royal armed forces to a state of perfection. At this time, every male subject was likely to be called for a term of military service, in theory at least. Those people who could afford to buy exemption for themselves, in actual practice, or even send a slave to serve the term, did so. The individuals who did not have the financial means would, of course, undergo military service.

The backbone of the Assyrian army was the King's personal bodyguard, called the "Quradu", or "strong ones", who numbered 1,000. This was a corps d'elite of seasoned warriors who were responsible for the King's personal safety. Special detachments of these guards protected the royal family and were entrusted with confidential missions.

The rest of the army was composed of a national militia, which could be mobilised in the event of an emergency, and auxiliaries. This army was based on conscription, to which all fief holders were liable by law. In addition, contingents of fighting men were provided by villages as a form of taxation. For a campaign, all, or part of, the national militia would be called up and this force would consist of all the men who were capable of bearing arms. They would have served for a period previously in the standing army in order to qualify for the militia.

The auxiliary units consisted of allies from the Empire, in addition to enemy troops who had been captured in battle and were drafted into the Assyrian army and forced to fight for them. This mass of raw levies would not be placed amongst the militia troops as this would obviously lead to confusion in battle.

For major operations, the armed forces were led by the King himself. In battle, the King as c in c, was regarded as the General of Ashur in which he played the role of the deputy of the God himself. The symbol of Ashur was a winged sun disc containing the superimposed bust of an archer. The sun disc had been adopted from the Egyptian symbol of Re the sun god.

In the absence of the monarch, the campaign was sometimes conducted by the Rab-Shakeh who was "Chief of the Princes". This first royal son, who was always in close attendance on the King, was in actual fact the Vizier. The Rab-Shakeh, however, along with the Rab-sha-Reshi (another officer of high rank entitled "Chief of the Heads of Departments") were civil officers.

If the King was not present, then his place was usually taken by the Chief General (Turtan) who, as c in c, led the troops into battle and conducted the campaign personally. When the monarch actually led the forces in person, he very often placed the Turtan in command of a part of the army. In early times there were actually 2 Turtans of equal rank, but both were superior in rank to the Rab-Sha-Reshi. One sat on the King's right and the other on his left.

An officer of high rank beneath the supreme commander, and probably in reality a staff officer, was the Rab-Mugi.

The command of bodies of men in the field was taken by Governors, each of whom had his own personal adherents who served him.

The armies were divided into wings containing 15,000 men and were probably commanded by subsidiary Turtans who would be, in effect, Generals. The wings were further subdivided into units called Kisri, which were the normal tactical units and varied in size. These contained from 50 to 200 men and the smallest unit was the squad of 10 men led by an NCO.

The Kisri military formations, really companies, were commanded by a Rab-Kisri (Chief of the Kisri), or captain, whose subordinates were the "Officer of 50" and "Officer of 10" who obviously commanded the 50 and 10 man subdivisions respectively.

These component units of the Kisri contained men in national and regional formations, each one specialising in the tactics and weapons that they were best suited to. These formations of men, dressed and equipped the same, are actually the first instance of units bearing the same shield, uniform, and helmet, in the ancient world.

At the time of Ashurbanipal, the Assyrian armies were split up, on a decimal basis, into units containing 1,000, 100, 50, and 10 men each. The Kisri, however, remained the normal tactical unit.

The success of the Assyrian armies was partly due to the widespread use of iron, and partly due to the fact that their Kings were efficient field commanders, and also as a result of sound organisation. Their enemies were inferior in open battle and did not have much chance of success. They preferred to hold out in fortified strongholds, which led the Assyrians to develop the art of siege warfare to combat this.

Originally, the Assyrian armies consisted of infantry and chariotry. The chariots were heavy unwieldy vehicles which carried 2 men. These early chariots were modified to produce a vehicle more capable of manoeuvre.

In the 9th Century B.C. cavalry were added and eventually took precedence over the chariotry.

Infantry

The infantry, organised into distinct corps, was each distinguished by their own uniform and arms.

The shock troops, comprised of units of various types, were mainly spearmen who led the attack in hand fighting and the assault on fortified cities. These heavy infantry were protected by long mail coats and a pointed helmet with a metal hood attached.

The main power of the army, however, rested with the archers who were used in every type of attack and used powerful composite bows. The early archers, in long mail coats, were accompanied by a shield bearer who carried a small round shield to protect the archer's face. Apart from the heavy units, all the rest of the early infantry wore the same costume consisting of a short tunic, broad belt, and a pointed helmet. Some units of lighter armed archers wore elaborately embroidered tunics and were elites. They worked in pairs, with one acting as shield bearer for the other.

The auxiliaries were lightly armed in comparison to the shock troops, had neither armour nor shield, being armed only with clubs and slings initially. Their job was to penetrate the ranks of the enemy to turn hesitation into rout and then sack the camp.

Tiglath-Pileser III (745-727 B.C.) made many changes in the armed forces, one of them being the introduction of the "gerrhon" shield. This huge shield was of wicker, provided with a hood, and was held by a shield bearer. This device gave the archers more protection and also did away with the cumbersome mail coats.

All infantrymen were provided with a sword in addition to the main weapon, but there were units of swordsmen who used this as the main offence.

In the battle reliefs, long lines of spearmen can be seen marching in double file, while one shows infantry advancing through wooded country. The spearmen are represented line abreast in separate ranks with small scattered forces following in order to secure the flanks and rear.

At the time of Sargon II (722-705 B.C.), there were light and medium archery units.

The light archers wore a head fillet and a short tunic, but had neither shield nor attendant. Their usual position was in the van of battle, although they were sometimes preceded by heavy infantry.

Medium archers were provided with a mail coat to the waist, a pointed helmet, and were protected by an attendant who was either similarly dressed or in a tunic. The attendant was a spearman with either a round or a rectangular shield. Other medium units wore, in addition to the mail coat, a long robe to the ankles. They were protected by 2 shield bearers, one holding a gerrhon in front of the archer and the other shielding his head with a small round buckler. These units always fired standing and were of great value in the siege of fortified places.

From the palace of Sargon at Khorsabad are carved reliefs showing a battle formation with mercenary archers in the front rank. Behind them are depicted archers protected by shields in front of a further rank of spearmen with round shields. In the rear are more archers protected by round shields, which are held by shield bearers. All the heavy armed men appear to be native troops.

Another relief shows spearmen with round shields in the front rank, with a second line of archers behind them. These bowmen are firing down on one knee. A second line of archers, behind them, stand erect and aim over the heads of the men in front.

The battle line at Lachish, at the time of Sennacherib, was a main force of 3 lines supported by large numbers of chariots and cavalry in reserve. The first rank of infantry was of kneeling archers, the second of archers crouching forward, and the third of archers standing with spearmen and slingers interspersed in their ranks.

Archers are sometimes seen, during a siege, with the gerrhon shields placed side by side in the form of a palisade. In addition to offering protection, this formation would provide freedom of movement behind the wall of shields.

Sennacherib (705-681 B.C.) divided the infantry into distinct corps which were differently armed and had improved equipment.

He introduced slingers, an idea which he probably got from Egypt, and equipped them in a mail coat and helmet. They do not appear to have carried the stones in a bag but kept them at their feet. They operated in pairs behind the archers and provided high angled fire, useful when attacking fortified cities.

At this time, both light and medium archery units were comprised of 2 types.

The first were equipped as Sargon's light archers and carried a short sword and quiver. The second type were lighter armed as they did not even carry a sword; they were interspersed amongst other troop types.

The medium units were either protected by a gerrhon or fought in pairs without a shield. Some medium spearmen wore a mail coat to the waist and carried a large metal convex shield. These men, few in number, were rarely engaged in fighting and were never used in the assault during a siege. There is reason to believe that these men were the Royal Guard.

Light spearmen with crested helmets wore crossed bands on the chest and carried large circular wicker shields.

Pioneers wore a mail coat and carried a double headed axe.

At the time of Ashurbanipal, the archers and spearmen were simply divided into light and medium units.

Light archers were all equipped with swords but the medium units no longer fired from behind the gerrhon.

Medium spearmen carried a straight bottomed shield, rounded at the top, instead of the old convex oval type.

Light spearmen had a wickerwork shield of the same shape. Slingers were no longer medium infantry but were now lightly equipped.

There were also units of macemen and axemen, with armour but no shield. Axes either had a single blade or were double bladed like the labra and bipennis.

Chariotry

The chariotry provided the principal strength and power of the army in battles taking place on open ground, and worked in conjunction with cavalry. These units remained the elite corps throughout Assyria's history.

These chariots operated in units of 50, the commander's vehicle bearing a standard, either in the form of an emblem set inside a disc or the actual winged disc of Ashur. Some of these chariots carried 2 similarly shaped standards which were replaced, by Sargon II, with a single standard of a form uniting the two. In combat, they flew standards which provided identification and bore the troop or squadron emblem.

Chariots carried, in addition to arrows and axes, a type of lance fixed in a diagonal position at the rear of the vehicle. As well as being used as a spear, it could also have served the purpose of a standard or signalling device as the extreme end was ornamented and bore long fringed tassels.

The commander of a chariot unit may have been a Rab-Kisri, as in the case of the infantry, but this is not certain.

Originally, Assyrian chariots contained 2 men, a warrior and a charioteer, and were drawn by 2 horses.

King Ashurnasirpal II (884-859 B.C.) added a third horse, referred to as an "outrigger", which could have been used as a spare if one of the others was wounded, or as a means of escape for the bowman if misfortune befell the chariot.

King Shalmaneser III (859-824 B.C.) did away with the third horse and made the chariot a heavier vehicle. He increased the number of wheel spokes from 6 to 8, presumably for added strength.

Sargon II increased the crew to 3 men with the new man holding 2 shields to protect the other two. He also altered the position of the quivers.

King Ashurbanipal increased the chariot crew to 4 men and developed them into a mounted infantry unit. These consisted of the warrior, driver, and 2 shield bearers. He also increased the weight of the chariot, which was now pulled by 4 horses. These chariots had very large, heavy, wheels, some of which were provided with metal studs on the rims.

Assyrian chariot crewmen are shown as both light and heavy armed, so they probably had both light and heavy chariot units. There is no difference in the respective vehicles of a given period, but would be designated with respect to the defensive armour and weapons of the crewmen. This was similar to the Egyptian light and heavy chariot units of some 500 years earlier.

In the open battle they probably also operated in much the same way as the Egyptians had done. This would consist of using the light chariotry for skirmishing with the enemy and then cutting off a retreat, in conjunction with cavalry in the case of the Assyrians. The heavy squadrons then engaged in a head on clash which was followed by melee fighting.

In addition to firing from the chariot, chariot warriors sometimes halted and fired from a position on the ground in front of the horses. When fighting in this manner, he was protected by a shield held by an attendant who was also armed with a spear.

Cavalry

The Assyrian armies of infantry and chariotry first incorporated cavalry after the reign of Tiglath-Pileser I (1120 B.C.). They were the first people to use a cavalry force, but only small numbers of these were employed in the early periods.

The early cavalry horses were equipped as the chariot horses and wore a harness of no use whatsoever to a cavalry horse. The origin of this situation lay probably in the fact that chariot horses were unhitched and ridden in situations where it was impossible to use the vehicle.

These early cavalymen, really mounted infantry, were accompanied by an attendant, also mounted, and unarmed, whose job it was to manage both horses and particularly to guide the archer's horse whilst he fired. The attendants were needed as these early cavalymen were not very proficient at riding and could not control a horse properly. These horse archers either fired when the horse was stationary or actually dismounted to do so.

Later cavalry dispensed with the attendant as they became more proficient on horse back. In addition to archers, there were now units of mounted spearmen who fought from the saddle. The harness was, by now, simpler and a saddle cloth was used.

Sennacherib equipped the cavalry with a long mail coat which was worn by both archers and spearmen. These archers carried bows 4' long and sometimes the spearmen also carried bows, slung across the shoulder, which were a reserve weapon.

Esarhaddon (681-669 B.C.) equipped the cavalry bowmen with a large protective saddlecloth as a defence against missile weapons. It was united by a breast piece and extended to the rear of the horse.

Both branches of the cavalry (archers and spearmen) were used in both long and short range combat and operated mainly on the flanks to prevent any escape by the enemy. Lancers followed up a defeated enemy. They were employed only in open battle and, in particular, proved useful in wooded and hilly areas but were never employed in the assault on fortified strongholds.

Siege Engines

Early battering rams were about 15' long and ran on 6 wheels. They were provided with protective towers containing archers to cover their efforts. The ram had a wooden shaft with a heavy metal head used to batter the wall down, presumably by being swung in an arc against the wall or lifted and dropped on to the top.

Shalmaneser III introduced a long, low, type of ram on 4 wheels which was more mobile and was not as heavy. It had a fixed bronze, snout type, head and was pushed against the walls. A heavier model ran on 6 wheels.

Tiglath-Pileser III replaced the previous engines with much lighter models with a spade shaped head which was inserted between the bricks and used as a lever. He used his siege engines in batteries or groups in order to provide a concentration of effort at one point.

Sennacherib developed the battering rams so that they could be dismantled and assembled on the actual theatre of operations instead of being drawn there as previously. He also lengthened the ramming rod which he provided with a long spear-shaped head.

Order of march

When the army was on the march, the King, in the Royal chariot, led the troops and was preceded and followed by the Quradu (spearmen of the Royal Guard), and a detachment of horse archers. The Quradu were the only properly drilled troops and are shown marching with an easy stride. The quiver and mace bearer walked either in front or behind the Royal chariot and the symbol of sovereignty, the parasol, was held over the King's head.

Then came the main army of infantry and cavalry, with the chariots and siege engines in the rear (unless they were actually built on the scene of operations).

When the march was through wooded country, a corps of pioneers advanced ahead of the army to clear a path.

Chariots and baggage waggons crossed rivers by means of a bridge of boats, or on light rafts which were probably supported by inflated skins. Men floated across on inflated sheep's bladders.

The Arameans (Syrians)

The Arameans, originally known as the Arimi, Suti, and Khabiri, were later called Syrians by the Jews.

The most influential of the Aramean kingdoms was Damascus, to which the Hebrew kingdoms of Israel and Judah were subject. Israel was an ally of Damascus but Judah, originally allied with Egypt, eventually became subject to Damascus also.

The Arameans were fearless warriors accustomed to generations of desert warfare. Their armies had great mobility and consisted mainly of mounted infantry, allied with Arab light infantry mounted on dromedaries.

They were more than a fair match for the Assyrian infantry and chariotry, and it was not until cavalry were employed by the Assyrians that their operations against the Arameans were successful.

References to military organisation are extremely vague but, with regard to the Hebrews, the army at the time of King David very likely applied in later times.

The Hebrew army was comprised of the regular army which was composed of Israelites and foreign mercenaries, and the militia. The nucleus of this force was a formation of from 400 to 600 elite troops. The top commanders, who were veteran soldiers, were known as "the 30".

The mercenaries were mainly recruited from the Sea Peoples, notably the Philistines.

The militia was formed from reserves who were only called for service in the event of a war, but did a period of one months service every year. This militia force consisted of 12 formations of 24,000 men and, by doing one months service each per year, David had a force of 24,000 men at any one time, under arms, to supplement the standing army of professional soldiers. The 12 formations were not, however, organised on a tribal basis (i.e. the 12 tribes) but each contained a balance of warrior types of equal strength and composition.

This army had no real use for chariotry mainly due to the hilly terrain which rendered them useless, but they must have had some as David captured some to use as "reserves".

The subsequent Kings employed chariots in quite substantial numbers – Solomon had in the region of 500. The figure of 1,400 quoted in the Bible probably refers to the actual chariot horses. Ahab had stables for 450 horses at Megiddo, which was a base for a 3 squadron chariot formation of 50 vehicles each.

Babylonian

The Babylonian armies consisted of infantry, cavalry, and chariots. These armies were poorly disciplined and were formed from native troops, supplemented with mercenaries which included Shuhites. Elamites, and Cissians.

The bow was the favourite weapon and, according to the Bible, it was due to this that the Babylonians proved so formidable in battle.

Cavalry provided the main strength of the army and the Babylonian forces used to overrun Egypt. Palestine, and Syria, were composed mostly of horsemen.

Uartians

The Uartians were a military aristocracy like the Mitanni, and appear to have been of Hatti stock like the Hittites. The Assyrians experienced great difficulty preventing their southward expansion and, at times, were unable to hold their own and suffered loss of prestige due to being defeated in battle on some occasions.

The Uartians are depicted as being very similar in dress and arms to the Medes, except that some of them wore an early type of crested helmet. Their armies contained chariots and cavalry, in addition to infantry, in keeping with other nations of the period.

They were capable of putting large armies into the field and fought the battle of Kumukh with a force of 70,000 men.

Medes

The Medes were originally a nation of horse archers and were probably as loosely organised as the Scythians. They fought the Assyrians in later times, however, mainly as spearmen and were very similar in appearance to the Uartians.

Allied with the Babylonians, Persians, and Arabs, they destroyed the Assyrian city of Nineveh with an army totalling 400,000.

Herodotus, in a later period, says that the Medes wore mail coats with overlapping plates like fish scales. This scale armour, and shields which rested on the ground, were presumably adopted from Assyria.

Scythians

These were a nation of cavalry archers and were composed of a number of tribes, at the head of which was a Royal tribe similar to the Golden Horde of the Mongols. There was virtually no organisation and the most fearless chiefs appear to have led the hordes in battle.

The Scythians were mainly cavalry and were probably the first people to actually use the horse for riding, but do not appear to have used chariots at all.

In addition to bows and arrows, they also used spears, daggers and battle axes, but were primarily very good archers and excellent horsemen.

COMPOSITION OF ARMIES

Assyria

Actual numbers of troops are, in a lot of cases, exaggerated and are, therefore misleading as are many totals of Ancient times. It can be seen, however, that the infantry, chariotry, and cavalry, were of similar relative proportions in the various Assyrian armies for which we have figures at all.

The army led by Holofernes, to attack Syria and Palestine, was composed of 120,000 infantry and 12,000 cavalry and, according to Xenophon, the Assyrians brought 20,000 cavalry and 200 chariots against Cyrus. Xenophon clearly contrasts the large numbers of infantry with the comparatively small numbers of cavalry and chariots. Herodotus says that the Assyrians who served with Xerxes were exclusively an infantry force.

The Assyrian monuments show at least 10 soldiers on foot for one mounted, and at least 100 for each chariot. Although their cavalry and chariots proved extremely useful in the initial shock of battle, it was to the infantry that success was mainly due.

Ctesias says that the army of Ninus was composed of 1,700,000 infantry, 210,000 cavalry, and 10,600 chariots. These numbers appear to be horribly inflated but do give the proportions of 8 infantry to 1 cavalryman, 155 infantry to 1 chariot, and 18 cavalry to 1 chariot.

The common proportion of forces, however, appears to have been 1 chariot to 100 cavalry and 10 infantry for every cavalryman, although sometimes it was only 10 cavalry per chariot, and 100 infantry.

Alexander the Great, who placed great reliance on cavalry, had a proportion of cavalry to infantry of about 1 to 6, whilst the Persians, at Gaugamela, had 1 cavalryman to every 25 infantry. At the time of the Roman Republic, the proportion of cavalry to infantry was 1 to 10 and, under the Empire, increased to 1 to 8 by the end of the 1st Century A.D., and to 1 to 4 by the 5th.

To apply the Assyrian proportions of 1,000 infantry to 100 cavalry to 1 chariot, it would appear that the army of Sennacherib contained in the order of 168 chariots, 16,800 cavalry, and 168,000 infantry. By the same reckoning, Shalmaneser III fought the battle of Karkar with 109 chariots, 10,900 cavalry, and 109,000 infantry.

According to Temen-Bar, the proportion of officers to ranks was:—
460 superior officers, 1121 captains, and 13,000 fighting men. The total strength of 14,581 is pretty near the figure given for an army wing.

The various proportions of individual troop types used by the Assyrians are not known as no reference is made to this aspect of their military organisation. However, taking into account the proportion of 1 chariot: 100 cavalry: 1,000 infantry, it is apparent that infantry constituted approximately 90% of the armed forces. Cavalry provided 9% – 9½%, and chariotry contributed from 0.09% to 1% maximum. These values are obviously taken to the nearest round figure.

The infantry percentages tabulated below are extremely tentative and serve only to illustrate the relative importance of each troop type at different periods.

Ashurnasirpal II

Infantry – Heavy Spearmen and Archers (with shield bearer)	30%
Light Spearmen and Archers (with shield bearer)	40%
Light Swordsmen	10%
Pioneers	10%
Cavalry – Light archers with attendant	9%

The percentage of swordsmen would have been small in comparison to the other infantry types. Light spearmen and archers could have possibly outnumbered the heavier types.

Sargon II

Infantry – Light Archers and Spearmen	40%
Medium Archers (2 types)	35%
Light Swordsmen	5%
Pioneers	10%
Cavalry – Light Archers	5%
Light Spearmen	4½%

Light infantry were possibly more numerous than medium types with a much reduced number of swordsmen. Cavalry, now more numerous, were 100% light and probably contained more archers than spearmen.

Sennacherib

Infantry – Light Archers (2 types) and Spearmen.	25%
Medium Archers (2 types) and Spearmen.	40%
Medium Slingers	15%
Pioneers	10%
Cavalry – Medium Spearmen	4½%
Medium Archers	5%

The accent was on medium troops with a proportion of slingers added. Cavalry were now predominantly medium types with a high proportion of archers.

Ashurbanipal

Infantry – Light and Medium Archers	35%
Light and Medium Spearmen	30%
Light Slingers	15%
Medium Axemen, Macemen, and Pioneers	10%
Cavalry – Medium Spearmen and Archers	4½%

Cavalry types appear to have remained unchanged but more light infantry, including slingers, were employed.

Chariotry

The chariotry, in all cases, was probably split up into 50% light and 50% heavy units. Under Ashurnasirpal II the maximum chariotry percentage would have been about 1%. This figure decreased subsequently as the Cavalry percentage increased.

Arameans (Syrians)

Most Eastern armies, including the Syrians and their allies, were composed of the 3 basic formations:— infantry, cavalry, and chariots.

The composition of the various arms is not known although it was very likely similar to the Assyrian in most respects. The main difference lay in the inferior armour, and valour, of the Syrians. The Assyrian armourers were masters of their trade whereas the Aramean tribes and their allies were mainly light infantry and cavalry. They also used light infantry mounted on dromedaries, Arabian allies, who would not have been very successful against the Assyrian cavalry unless the horses became unnerved.

The Syrians and their allies could, however, put large armies into the field as can be observed by noting some of the forces at the battle of Karkar. In this encounter, the King of Damascus, Ben-Hadad II, provided 20,000 men and 1,200 chariots; Irhuleni, King of Hamath provided 10,000 men and 700 chariots; Adoni-bal of Siana contributed 20,000 men and 30 chariots. King Ahab of Israel provided 10,000 men, the King of Egypt 1,000 men, and the Arabian, Gindibua, 1,000 camels.

At Mount Hermon, King Hazael lost 16,000 men, 1,121 chariots, and 470 cavalry.

Babylonians

Babylonian armies were composed of infantry, cavalry, and chariots, similar to the Syrian forces. Originally they were inferior to the Assyrians due to poor discipline and organisation.

Later Babylonian armies were better organised and could put large forces into the field. At Dur-Papsukal they had a minimum force of 5,000 infantry, 2,000 cavalry, and 100 chariots. Babylon was guarded against Assyrian attack by a look-out force of 4,000 infantry and 600 cavalry.

The Babylonians were renowned as proficient archers and virtually all their infantry and cavalry were so armed.

At the time of Herodotus they were armed and dressed in the Assyrian manner and fought similarly, including siege warfare.

Scythians

The Scythians were mostly, if not all, cavalry and were bow armed, some carrying a spear or javelin in addition.

Herodotus says that the Scythians attacked by Darius were 100% cavalry.

Whatever small amount of infantry they had appear to have been spearmen and some archers, who also carried a battle axe.

Medes

Like the Scythians, the early Median armies were 100% cavalry bowmen and were very skilful.

The later armies were composed of the 3 arms common to the other peoples and, that they could field large forces, is shown by the fact that, allied with the Babylonians and Persians, they attacked Assyria with a total force of 400,000 men.

Urtians

The Urtian armies were similar in composition to their Assyrian, Syrian, and Babylonian counterparts.

Spearmen appear to have constituted the highest % of infantry types.

Elamites

The armies of Elam were organised, in the later period at least, along the same lines as the other enemies of Assyria. Their infantry archery units were renowned and they could put large numbers of these into the field.

At the battle of Kutha the Elamite King provided 80,000 archers to help the Babylonians.

DRESS AND ARMS

Up to the New Assyrian Empire

58. King Ashurnasirpal II

The royal dress consisted of a short sleeved tunic reaching to the ankles. Assyrian robes were usually white, pale lilac, orange, or light green, with coloured borders. In this case, however, part of the dress would be red, a colour used only by Royalty and people of high rank. A small rectangular, fringed, shawl which covered the hips, was held in place by a wide belt over which was a thinner belt to hold daggers. The embroidery on the robes was either of fine gold and silver thread or small, thin plates of metal. The tiara was of white felt with one or more red bands, a gold design sewn on, and two long ribbons hung down at the back and reached to the waist.

The sword (namsaru) with a finely engraved handle, had a scabbard decorated with 2 carved crouching lions. In his belt he carried twin daggers (patru), and always bore a ceremonial mace as a symbol of power. The mace was a wooden bar with a metal or stone ball at one end and a leather strap or tassel at the other end.

59. Turtan

The dress of the Turtan was basically similar to that of the King. In place of the tiara he wore an ornamental head fillet which was wider at the front than at the back. It was coloured blue as were the tunic fringes. Some head fillets were of gold with a jewel set in the front.

In addition to earrings and bands of metal on the upper arm, a strap bearing a circular ornament was worn on the wrist. At a glance, this object looks remarkably like a modern wrist watch!

Sandals were worn, as in the case of the King, and his sword was held by a leather strap which passed over the right shoulder.

60. Elite Archer

These light archers wore a highly patterned tunic, held by a broad belt with a superimposed thinner strap, and a fringed strap over the shoulder to hold the quiver.

They wore the conical shaped helmet, characteristic of this early period, of iron reinforced with copper or bronze ribs. They went barefoot and were armed with a 4' curved bow, at each end of which was a small button or knob of ivory with a notch to hold the string.

These archers worked in pairs with one man holding a long shield to protect the man firing. The shield bearer was armed and equipped as the archer, and the shield was rectangular and made of wicker.

61. Shield Bearer

This shield bearer, for an ordinary light archer, wore the conical shaped helmet, which was the main type, and wore a plain woollen fringed tunic.

He wore no sandals and was armed with a short sword for use in hand to hand fighting, and carried a long shield which was rectangular and convex with a handle in the middle. The shield was made from wicker, osier or reed, which was laid in layers and secured by bands of metal in a sort of zig zag pattern. This man is dressed and armed in identical fashion to the spearmen of this period.

(a) shows that these shields were slightly curved in section.

62. Heavy Infantry Shield Bearer

These men wore a mail coat which covered them from neck to ankle, and protection was offered to the face by means of a mail curtain which covered the upper chest, neck, chin, and ears. This armour offered maximum protection and was held at the waist by a broad belt, possibly designed to take some of the strain off the shoulders as the weight would be tremendous.

Heavy archers and spearmen were dressed similarly and carried a sword as did all soldiers. Swords of this period were slim and bore the so called "lily design" on the scabbard. The convex buckler of metal had metal spikes on the face and an animal head boss.

- (a) shows the side view of the shield.

63. Cavalryman

Cavalrymen were really mounted infantry and rode in pairs with one man managing the horses whilst the other shot.

They wore a plain, short sleeved, tunic which reached to the knee and was fringed at the hem; they rode barefoot.

The angular bow was constructed of two or more strips of wood glued together thus forming a composite bow.

- (a) The attendant, who controlled the horses, wore a skull cap and plain tunic and carried a round shield which was about 2' in diameter and made of a single piece of metal.

64. Charioteer

Charioteers were dressed and equipped as the light archers but did not wear a helmet of any description, although some chariots carried men dressed as Fig. 62.

The bow carried was of the curved type which was not used as much as the more popular angular one. The armguard was of simple design and consisted of a leaf shaped piece of leather secured by straps which terminated above the elbow.

In his right hand is a mace decorated with a disc bearing a rosette motif, and held secure by a loop of leather which passed round the hand.

65. Aramean Infantryman

This enemy soldier, from the battle reliefs at Nimrud, was a member of an Aramean tribe which is indicated by the head fillet. He also has his beard and hair cut in the Syrian manner.

They wore tunics similar to the Assyrians but decorated with a sort of zig zag pattern. The sword was held by a leather strap which appears to have passed over each shoulder and met at the front.

Aramean infantry archers and also cavalry were dressed in a similar fashion.

66. Assyrian Officer

This man, actually a shield bearer for the King, wears a full length tunic and the characteristic helmet of iron. He wears sandals and protected the King by means of a round metal shield which was the same type as that carried by Fig. 63(a).

He was armed with sword and dagger and carried a quiver of arrows for the King's use. Quivers were provided with metal rings to take the carrying strap, and were normally "u" shaped at the time of Ashurnasirpal II.

58



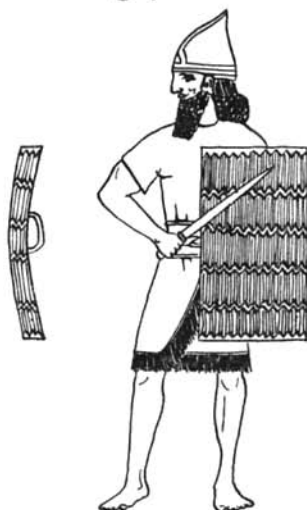
59



60



61



62



63



64



65



Dress of the New Assyrian Empire

TIGLATH-PILESER III

67. Heavy Archer

These men wore a slightly shorter mail tunic but, otherwise, apart from the fact that they did not wear sandals, were similar to earlier heavy infantry (Fig. 62).

He was protected by a rectangular, slightly convex, shield of wicker (a) held by an attendant. These shields were larger than the ones carried by shield bearers of the light archers. (Fig. 61).

(b) shows detail of armour plate which was rounded at the top and strengthened by a longitudinal ridge of copper. These plates of iron were from 2" to 3" in length and were similar to the earlier Egyptian pattern.

Armour of this type was composed of successive rows of scales secured to linen or felt but not overlapped.

Heavy spearmen were similarly dressed and equipped and were also provided with the wicker shield for their own protection.

68. Hebrew High Ranking Officer

This man, actually from the time of Shalmaneser III and Ahab of Israel, wore the basic garment which was a wrap round skirt of cloth or leather. This was held in place by a sort of belt which also served to hold weapons and valuables. On the upper part of the body was worn a short sleeved woollen shirt with brightly patterned edging. The long cloak, with sleeves, open at the front and decorated along the edges, was worn in colder weather and also served as a blanket for sleeping.

He wears a narrow beard and is armed with a broad bladed dagger. Being of high rank, he carried a mace and wore a helmet of iron with a decorative band and horns at the front.

69. Hebrew Guardsman

This man wears the basic wrap round garment, as did all Hebrews, and a woollen upper dress rather like a modern tee shirt.

He is armed with sword and spear and, for body protection, carries a circular bronze or gilded shield highly embossed with patterns of the chase etc. The helmet, of bronze or iron, was similar to that of the Hyksos of the Egyptian 17th Dynasty and was probably a development of that type (see Fig. 16).

70. Light Spearman

Light spearmen, from now onwards, usually wore crested helmets and crossed belts on the chest. At the centre of these belts, both back and front, was a circular metal disc.

They wore the usual tunic extending to the knee, secured by a broad girdle, and carried a round metal shield which was reinforced by the addition of concentric raised metal ridges.

Crested helmets were not used by the Assyrians before Tiglath-Pileser III and the one shown had a feathered crest in the shape of a fan. These were adopted from the Urartians' plumed helmet which was like that of the Carians.

Spears of this period were comparatively short and, in this case, bore a leaf shaped blade. At this time, swords had become wider and shorter as the chief dependence in battle lay with the spearmen and archers, both foot and mounted. Due to the, now developed, heavy chariots and the light siege machines, the enemy were first attacked at some distance. The short sword was then used in hand to hand fighting after the damage had been done by other weapons.

66



67



a



68



69



70



71



72



a

73



71. Auxiliary Light Archer

This light infantryman was probably from a Syrian tribe and wore the common fillet, broad in front, which was no more than a band of ribbon.

The skirt was much shorter than the Assyrian type and, in this case, had an additional pendant fringe at the front centre. The embroidered chest strap was to hold the quiver in position on the back. The quiver was pushed through the strap diagonally.

72. Assyrian Officer

Officers of this period wore a corselet, of square metal plates, which extended to the waist. This was worn over a long tunic, fringed, which reached to the ankles.

The helmet was of a semi-circular shape with a separate blunt ended projection on top (admirably described by Yadin as an upturned wineglass with the stem broken off). This type of helmet could have been derived through contact with the Urartians. Assyria's contact with these people, and also with Medes and Phoenicians, led to the introduction of new helmet shapes.

- (a) The gerrhon, of wicker, was as tall as a man and, in this case, was rectangular with a horizontal projection at the top as a protection against overhead missiles. These shields were of wicker but were still very heavy so they were always rested on the ground. The shield bearer was armed with a sword and carried arrows for the archer.

73. Rab-Sha-Reshi

This officer of high rank wears no defensive armour or helmet, carries a mace as a sign of his rank, and was always in close attendance upon the King.

His decorated woollen tunic reaches to the ankles and is held at the waist by an elaborate girdle. For ornamentation he wears armbands of metal, earrings, and a necklace of beads. The head fillet, highly decorated, widened at the back and not at the front as in the case of the Turtan.

74. Shield Bearer

These light infantrymen wore a conical helmet with ear pieces, without reinforcing bars, and a pendant fringe on the plain tunic.

The small shield was circular and decorated with concentric rings. Infantrymen of this type went barefoot and were armed only with a dagger.

75. Medium Archer

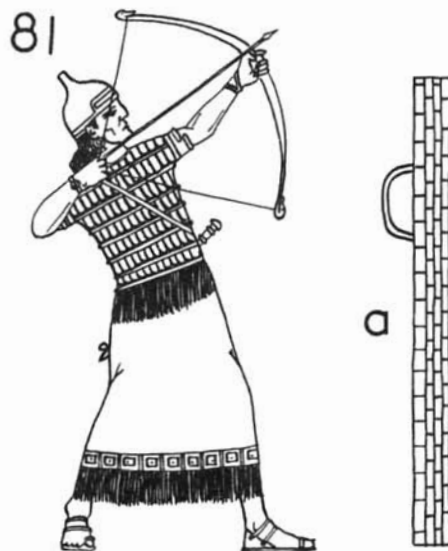
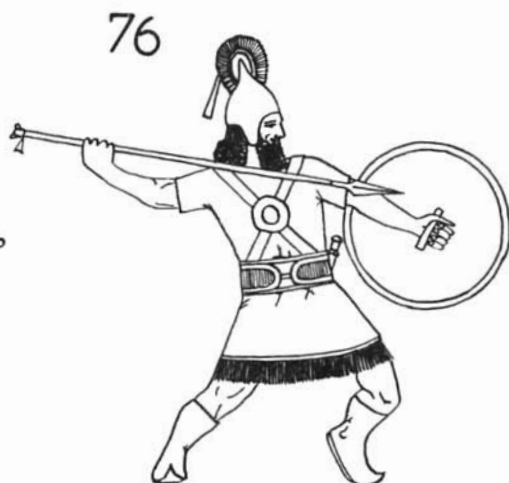
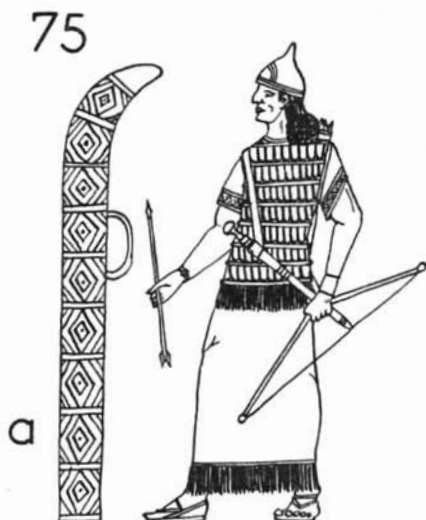
Over the full length tunic, this clean shaven archer wears a cuirass of rectangular metal plates interspersed with what appears to be linen or leather strips to facilitate ease of movement. The metal helmet, similar to that worn by Fig. 72, has reinforcing bands at the base and tapers more gradually to the summit.

- (a) The gerrhon was provided, in this case, with a projecting hood curling over to a point. It was held in position by a large handle half way down the inside.

The sword, with a slightly leaf shaped blade, was heavier than previous types and also had a bigger pommel.

76. Anatolian Auxiliary

This infantryman wears the usual tunic and crossed belts of the light spearmen and carries the circular shield.



The pointed helmet with ear protection pieces bears a crescent shaped, feathered, crest with a tassel at the back.

Spears usually had a decorated butt with the addition of tassels. It is quite conceivable that these spears could have been used for signalling in some cases.

The tall boots, pointed at the toe, indicate that this man is from Anatolia, the Hittite country (see Figs. 41 and 42).

SARGON II

77. Philistine Chieftain

Although this figure is from the time of Sennacherib, the costume of the Philistines had not changed much since Egyptian times (see Figs. 50 and 51).

This man wears the characteristic head dress of high standing feathers which his ancestors had used long before in Crete. His robe reaches almost to the ankles and has a many folded girdle. His hair is worn in a bunch on the neck, but he has no beard, and he carries a torch as a symbol of his rank.

Ordinary Philistine infantrymen were dressed the same except that the tunic reached only to the knees, the girdle was of a simpler design, and they were mostly bearded.

- (a) shows the head of an ordinary Philistine soldier showing a head dress with ear pieces. These men were armed with spears.

78. Medium Archer

This medium infantryman is acting as shield bearer for the medium archer shown in Fig. 81. He holds the wicker shield up to protect the man's face.

His cuirass was of metal plates, which were round at the base and straight at the top, was worn over the short tunic, in this case decorated with concentric squares.

The helmet is of circular section and tapers at the summit where there is a small knob. Helmets of this type were with or without ear pieces and, in this case, were provided with a neck guard. This facility could have been introduced into Assyria by the N. Syrians.

He is armed with an angular bow which, along with the quiver, is slung over the left shoulder. The highly decorated quiver was attached to the strap by rings fixed to a bar which projected some way past the arrows. This rod terminated in the shape of a pomegranate usually, and was to stiffen the quiver framework in addition to holding the rings. The rod could, of course, be grasped to pull the quiver forward in order to extract arrows.

79. Spearman

This infantryman wears a tunic which bears a design that could indicate some form of reinforcement. It was probably made of square bosses of horn or metal sewn on to the tunic (it would offer a certain amount of protection, particularly against a sword stroke). As could that of Fig. 78.

He is armed with spear and sword, the latter in a plain scabbard, and wears leather boots which reach half way up the calf and are laced in front. Most of the spearmen, however, wore sandals.

The shield is highly decorated with a geometric design and is of the usual circular type.

The helmet of metal has ear pieces and a crest which curls forward with a tassel at the rear. One example of a helmet crest, from Khorsabad, was coloured blue and orange alternately. The helmets of spearmen were always crested.

The spear, 4' to 6' long, had a weight at the end for balance as it was held nearer the back than the front.

80. **Aramean Auxiliary Archer**

This light infantryman, dressed in a short, patterned, kilt held by a broad girdle, has no protection whatsoever.

His hair and beard are in the characteristic Syrian style and the head fillet is a plain band of even width. He wears earrings and a short leather wrist guard, and his sword scabbard terminates in a bulb shape.

The quiver has a cloth cover to prevent the arrows from falling out and was usually in the form of tassels or a fringe.

81. **Medium Archer**

This man wears a metal scale cuirass over a full length, fringed, tunic and is armed with a sword in addition to a bow. The ends of the bow had now become more elaborate and were in the form of a duck's head with the string fastened round the beak. He does not carry a quiver as his arrows were supplied by an attendant.

The helmet is similar to Fig. 72 except that it was made of a single piece and had reinforcing bands added. Soldiers of this type always wore sandals.

- (a) The gerrhon has, in this case, a brickwork design but does not have an angular projection at the top. No front view of the gerrhon is shown on the reliefs but it must have been very wide to offer complete protection to 2 or 3 men.

82. **Cavalry Lancer**

These men wore the usual tunic with a broad fringe at the hem. They wore tight fitting trousers which were either of quilted material or possibly of some kind of chain mail, garters below the knee, and laced boots.

The helmet shown is the main type of this period (cavalry never wore crested helmets).

Although primarily lancers, they also carried an angular bow as a reserve weapon in the event of being deprived of their lance. These mounted spearmen, and archers, no longer required attendants as they could manage the horse themselves due to increased proficiency in riding.

The spears carried by these cavalrymen were longer than those of the infantry and, in some cases, were over 9' long.

83. **High Ranking Officer**

The dress of high ranking officers now consisted of the long tunic, over which was worn a single fringed shawl over the left shoulder and round the stomach.

They did not wear a helmet and the man shown carries a mace as a sign of his rank.

The sword was not held by means of a strap over the shoulder but appears to have passed through a fold in the garment.

Sandals were of coloured leather, red, or sometimes with alternate bands of blue and orange on the heel piece.

84. Urartian Infantryman

This warrior wears no helmet and is armed with a spear and carries a rectangular wicker shield with edging of either wood or leather or, in some cases, metal.

The plain tunic reaches to just above the knee and is secured at the waist by a girdle of ribbon from which hangs a tassel or some pendant object. The cloak, which has apparently only one sleeve, is secured at the neck and is of sheepskin or goatskin.

85. Mede Infantryman

The Medes, at this period, were dressed and armed almost identically to the Urartians except for the fact that they did not wear crested helmets.

The hair was short, held by a red fillet, and the beard was curled and kept short. High laced boots were usually worn but sometimes they had boots of the Hittite type as shown.

They were armed with a long spear and wicker shield but without bow or sword, unlike desert nomads.

- (a) shows head dress of Median chieftain which was a leather skull cap without ear flaps. The remainder of his dress would have been similar to that of Fig. 87.

86. Light Cavalry Archer

These men were dressed the same as the mounted spearmen except that they did not wear a helmet. The boots worn by Assyrians, although laced at the front, probably had leather protecting the shin.

The bow was carried in the quiver which served as a bow case. The quiver shown was an unusual type which was provided with a sort of bag with tassels to protect the arrows. Most quivers were painted (actual representations show them as being red or blue) and were decorated with ivory or metal rosettes.

87. Urartian Chief

The Urartians wore their hair in closely twisted ringlets arranged in horizontal tiers. It was bound by a fillet with some of the ringlets hanging over the front. The man depicted wears his beard long as was the case in persons of high rank.

The tunic reached to the knees, or just below, and was secured at the waist by a girdle of woven ribbon from which hung a tassel. Laced boots reached either to the middle of the calf or, as shown, to above the knee. The skin worn over the shoulder was leopard or some other animal (leopards are found in Armenia) and was fastened by a cord at the right shoulder.

- (a) shows the Urartian helmet with crest which was fixed across the helmet crown but, later, was bunched together in the centre.

SENNACHERIB

88. Judean Infantryman

Taken from a relief depicting the Battle of Lachish, is this Judean infantryman who is dressed in the usual tunic and girdle typical of the Arameans.

This particular man, armed with a sword, wears a tall protective cap of felt or leather, or helmet, with long ear pieces which are fringed at the base. He is clean shaven and carries a round buckler. The defenders of Lachish attached their bucklers to the outside of the battlements and fired from behind them.

82



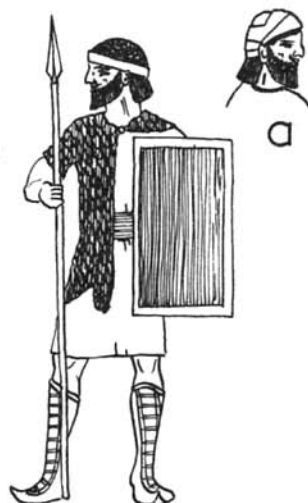
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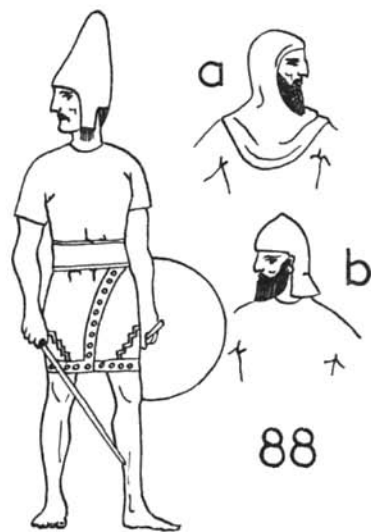
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88

Other warriors shown defending the city were armed with bow or spear, and some wore the simple head fillet in place of a helmet.

- (a) shows a defender of Gaza who wears some type of a protective hood which extends to the chest and leaves the face bare. His clothing and arms would be similar to the Judean.
- (b) shows a defender of Eqrn in Philistia who wears what appears to be a helmet of, possibly metal, but more likely leather which has an extended back to protect the nape of the neck, but without ear pieces.

These men were also armed and dressed in the Aramean manner although some defenders of Eqrn wore a single long robe.

89. **Light Archer**

These men wore a head fillet, with ear pieces, in place of a helmet and had a sleeveless tunic which was striped, or pleated, just below the waist and was longer at the back than the front.

The horizontal band passing round the body above the waist girdle was to hold the quiver.

The infantryman shown carries a curved bow.

90. **Assyrian Archer**

These men also wore a head fillet, without ear flaps, in place of a metal helmet. The fringed tunic had a pendant fringe hanging down at the front, and a decorated band crossed the chest.

Unlike the other light archers, their legs were protected by trousers and laced boots.

He is armed with an angular bow, a sword in a plain scabbard, and a rectangular quiver with reinforcing rod.

91. **Auxiliary Spearman**

As in the case of other auxiliaries, these men wore a tunic with the lower part decorated with the usual zig zag pattern. The trousers reached to above the knee but did not extend as far up as the base of the tunic. The cap of leather, or felt, was a tight fitting type with rectangular ear flaps and a neck guard.

The circular, convex, shield was decorated at the edge and round the centre, and was of metal. These shields, in some cases, exceeding 4' in diameter, were designed to deflect missiles as well as to give better protection to the sides of the body. When on the march, the shield was slung on the back.

- (a) shows side view of the shield.

92. **Medium Slinger**

The helmet worn by these men was similar in shape to the much earlier type of Ashurnasirpal II, but was provided with ear pieces. From this period onwards, the ear flaps were separate pieces of metal attached to the helmet by means of a hinge. Perforations on the rims of the helmet were for the addition of a cloth, or leather, lining.

A cuirass with short sleeves was worn, and reached to the waist and, over the shoulder, a broad leather strap passed and served to hold a sword or dagger. The sling itself was made from a double rope with a leather thong to hold the stone.

Slingers were provided with a cuirass as they were extremely vulnerable to injury due to the lack of a shield.

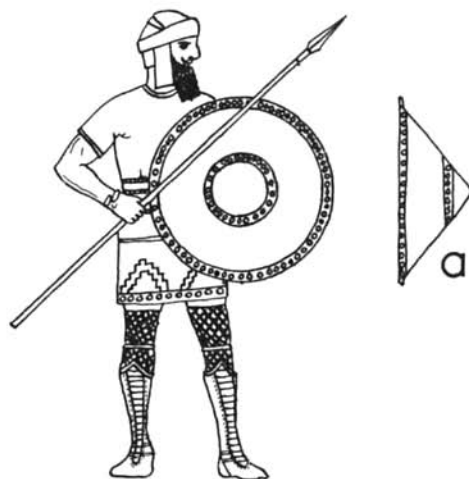
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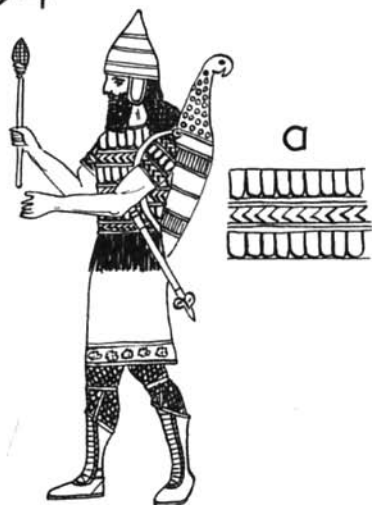
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96



93. **Light Spearman**

This man's tunic has sleeves which extend almost to the elbows and his trousers and boots were not worn by spearmen of this type in earlier periods.

The helmet worn by Assyrian light spearmen of Sennacherib had ear pieces and was surmounted by a crest similar to the later Greek style. Helmets of this type were also worn by sappers in the process of undermining city walls.

The shield was convex for better body protection and was round at the top and straight at the base. These shields had been designed to give better protection to a greater area of the body. Being convex in section, they could be carried on the back when on the march.

(a) shows the front view of the shield.

94. **Medium Archer**

This archer carries his bow in a decorated case with a cover in the form of the head and neck of a bird. In addition to the sword, which was general issue, he is armed with a mace with a pear-shaped head which is incised with criss cross lines. These men had either 1 or 2 attendants and fired from behind a gerrhon.

The helmet was pointed with reinforcing bars and had ear pieces attached to the rim. The mail corselet extended to the waist and had sleeves. The old rows of armour plates were now alternated with rows of scales, pointed at one end, and about 1" long. These alternate rows were probably to facilitate easier movement whilst still offering good protection.

(a) shows detail of plate arrangement of armour.

Mounted archers and spearmen were dressed the same as this man.

95. **Babylonian Infantryman**

These men wore only a wrap round kilt, held by a broad belt, and bound the hair with a fillet.

Babylonian bows were like the Assyrian type (curved) and had a knob at each end for the string. Arrows, with barbed points, were kept in a quiver which terminated with a large ornament resembling a spear head.

The dagger, worn in the belt, was short and similar to the Assyrian type but was less ornate. The axe had a long blade with a curved edge and sides. Three sharp spikes behind the blade served as a counter balance and could also do much damage in hand to hand fighting.

Babylonian cavalry were dressed similar to the infantry. The later Babylonians were dressed and armed almost exactly as the Assyrians.

96. **Auxiliary Archer**

These type of auxiliaries wore a broad, highly decorated, head fillet with fringed ear pieces. The cut of the beard would indicate that he was a Syrian.

He wears crossed bands on the chest and a short, patterned, tunic with a broad sword through the belt.

The quiver was of the type issued to Assyrian soldiers and the bow was the simple curved type.

97. Medium Archer

This archer wears a similar helmet to Fig. 94 but it has only a single band round the base. The cuirass, without sleeves, is of rows of metal plates which were rectangular in shape, and bears a fringe at the waist.

The tunic, undecorated at the hem, has fringed side and back pieces and also a pendant fringe.

Although this man is firing an angular bow, it assumes the same shape as that formed by a curved bow when fired.

This type of infantry wore no trousers and went barefoot in battle. They usually fought in pairs and fired together but were protected only by their cuirass and had no shield of any description.

ASHURBANIPAL

98. Slinger

Ashurbanipal introduced lighter slingers and did away with the medium type of Sennacherib.

These men, instead of the metal helmet, wore a leather head band with ear flaps, and wore crossed bands on the chest over a tunic.

Some lighter types wore a head fillet, were bare legged, and did not wear sandals, unlike the former types who were provided with trousers and leather boots.

99. Elamite Archer

The fillet with a knot at the back indicates that this man is an Elamite. They wore a long tunic which extended to just below the knee, and crossed straps on the chest with a large central disc.

They went barefoot and were renowned as archers. The rounded head on the quiver was a lid which was attached by a hinge and was to cover the arrows. Sometimes Elamite quivers had a cover which was shaped like a palm leaf.

100. Medium Spearman

These men wore a pointed helmet with reinforcing ribs and ear pieces. The shield was convex, straight at the bottom, and curved to a point at the top. It was decorated round the edge and also round the boss, which was situated near the top. Shields of this type were made of metal, possibly bronze and could, alternatively, have been of a plain pattern as in Fig. 93. Swords of this period were further improved and constructed to provide a more comfortable grip by having flat ribs above, and below, the solid round centre piece of the handle.

The Royal Guard were equipped as this but carried a large convex shield as shown in Fig. 91.

101. Light Spearman

The warrior shown wears a crested helmet characteristic of the light spearmen, as were the crossed belts and central metal disc. The helmet crest, possibly of hog's hair bristles, was short and angular in section. Earlier types of crest were more circular in section and also longer.

The shield, although shaped like that carried by Fig. 100, is of wicker edged with wood or metal.

These men, of the lighter type, wore no trousers, boots, or sandals, and had a plain tunic with a broad belt.

102. **Light Archer**

These men wore a short tunic, belted at the waist, and had a head fillet which was broader at the front than at the back. They were not provided with sandals and did not even have a sword.

Quivers of the type illustrated were sometimes made of wood which was sheathed in metal. Examples of both bronze and copper quivers have been unearthed by archaeologists.

103. **Medium Horse Archer**

These men were dressed similarly to Fig. 100 and carried the angular bow. The bow illustrated was of an elaborate type with a grip of twisted string and ends in the shape of a lion's head.

The helmets worn by this type of soldier bore thick ribbing which was characteristic of the period of Ashurbanipal, although the technique of this heavy reinforcing was probably introduced by Esarhaddon.

Warriors armed and dressed as this manned some of the chariots of Ashurbanipal and carried circular shields. Other charioteers of the period were similar to the earliest examples (Fig. 64) but had their hair secured by bands of rope as in (a).

104. **Scythian Horse Archer**

These coarse people never washed but applied a kind of paste to the body. They drank the blood of slain enemies and hung scalps on the bridle rein.

Their dress consisted of a leather, or some other thick material, jerkin which was trimmed with fur and patterned. This appears to have been brightly coloured, as was the case with the trousers which were of some thinner material. Soft overboots of leather were secured at the ankle.

Their hair and beard was long and unkempt, and they wore a peaked cap of leather or felt which covered the sides and back of the head, although some actually went bareheaded.

Although primarily archers, with 2' bows of horn, they often carried a spear or javelin in addition, and carried arrows in a quiver, which also served as a bow case, on the left hip.

(a) shows the cap secured under the chin, probably by strings which were tied.

The Scythian infantry, apparently not very numerous, carried a round or oval shield, either of wood or leather, with what appears to be stitching on the outer edges. Shield faces were decorated with the figure of an animal.

They were probably the earliest cavalry nation in existence and were the only ancient people to practice the gelding of horses.

In later times the Scythians sometimes wore bronze breastplates.

105. **Babylonian Officer**

The Babylonians, along with Elam and Urartu, possessed a common military strength and discipline equal to Assyria at this late period. The armies were all of a similar size and were equipped along the same lines so that no one state could overrun the others. The last vestiges of the Assyrian Empire were destroyed by a coalition of Babylonian, Median, and Scythian forces, who captured and sacked Nineveh.

The Babylonian officer shown is dressed almost exactly like his Assyrian counterparts with only a few minor differences. He does not wear quilted trousers above the knee but has stockings of the same material. The tunic, ending above the knee, is brightly bordered and a cloak is worn over the right shoulder. The boots, helmet, and armour, are all of Assyrian pattern, as is the sword.

97



98



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100



101



102



103



104



105



106. Shields

Assyrian shields, representing types which do not appear in the illustrations, are shown under the appropriate King in whose reign they appear.

Asurnasirpal II

- (a) The convex round shield shown had a raised outer rim and a central boss. The handle was rivetted to the body. This type of shield was apparently carried by Royal attendants.

Shalmaneser III

- (b) Small circular metal shield with central boss and metal studs spaced round the face.
- (c) This round buckler had a raised edge and central boss.
- (d) The small shield with a large central boss was used by Urartian horsemen and was probably of bronze.
- (e) The slightly larger, circular, shield was patterned in the form of spikes arranged in a circular pattern. This type was used offensively as well as for defence.

Sargon II

- (f), (g), (h) These metal shields were highly patterned in the form of concentric bands of design. The bands were decorated with a mixture of geometric patterns and rosettes. (h) has a floral shaped centre surrounding the boss.
- (i) This is of a similar type to the previous 3 but bears only a central design in the form of a rosette surrounded by a floral pattern.
- (j) The rectangular shield, with geometric design, was used by certain enemies of Sargon II and was probably of wood, covered with hide, and painted.

Sennacherib

- (k) This shield of wicker, being lighter and larger, gave greater mobility and protection. The horizontal lines indicate the wicker strips.
- (l) This more elaborate type consisted of sections, both vertical and horizontal, which were filled in with wicker.
- (m) This particular shield, also of wicker, had a wooden or metal rim, and bore a central boss and a brickwork wicker pattern.

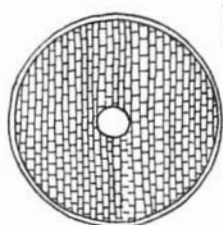
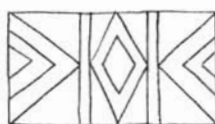
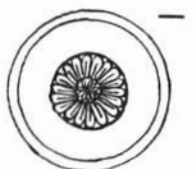
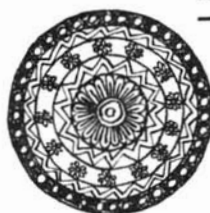
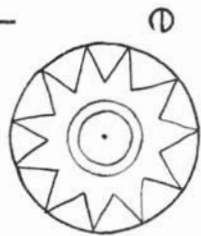
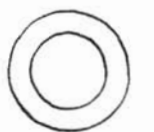
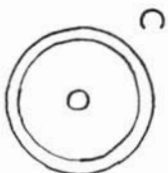
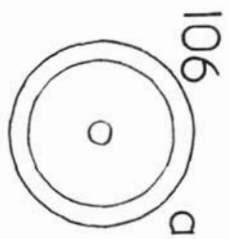
107. Assyrian Helmets

All Assyrian helmets had a smooth surface which would deflect blows and render them harmless. Enemy weapons would glance off the shaped surface, which was an innovation apparently without precedent.

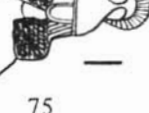
The helmets shown all illustrate ones which do not appear in the drawings of the troop types. They are arranged in chronological order under the name of the King during whose reign they appeared.

Tiglath-Pileser III

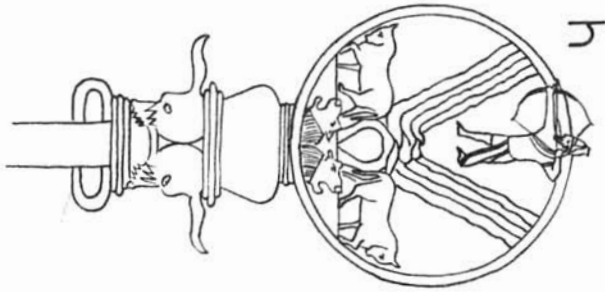
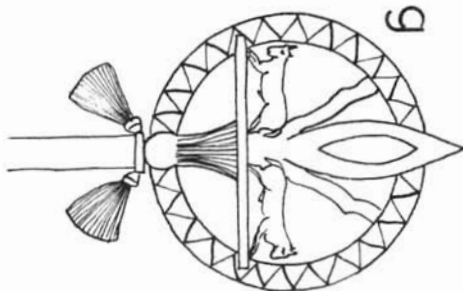
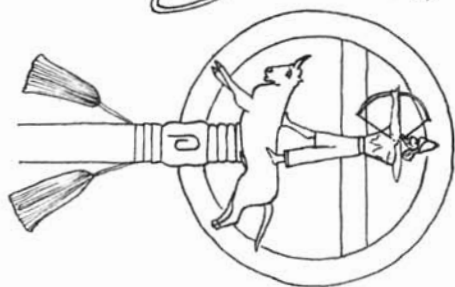
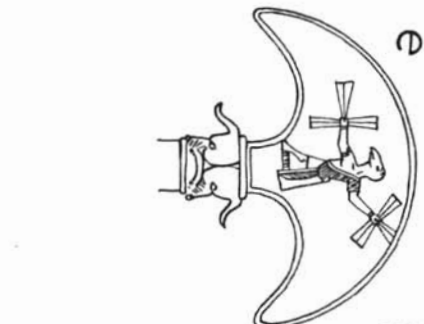
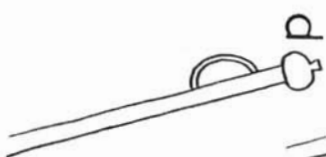
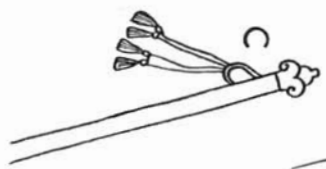
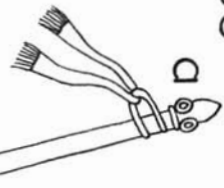
- (a) This funnel shaped helmet was either derived from the earlier shaped types of Ashurnasirpal II, or borrowed from enemies.
- (b) and (c) These types with a forward curling peak, the latter more pronounced and provided with ear flaps, were worn by mercenaries and were probably introduced into Assyria from Anatolia.
- (d) The helmet with a curved, feathered, crest was probably derived from (c) and was worn with or without earflaps.
- (e) Helmets of this type had a crest which was attached directly to the point of the helmet.



107



108



Sargon II

- (f) These squat funnel shaped helmets, in this case with ear flaps, were sometimes surmounted by a small button and, in some cases, had a neck guard.
- (g) Helmets without and (h) with, earflaps were probably derived from (c) and were an improvement on (d) which was also derived from the same source.
- (i) This helmet, with a round crest-like volute, was worn by auxiliary spearmen (probably Phrygians) at the time of Tiglath-Pileser III but, under Sargon II, became general issue.
- (j) Similar to (i), this helmet was an improvement in design in that it was surmounted by an embossed design somewhat resembling petals. This type was worn by spearmen.

Sennacherib

- (k) This type of helmet was worn by spearmen and was provided with long ear flaps made of separate metal pieces. The crest was attached directly to the point of the helmet.

Ashurbanipal

- (l) Similar to (e) but further strengthened by a rim round the base and separate ear pieces, this more elaborate type was worn by spearmen wearing crossed straps with a central disc.

108. Standards

Military standards were carried by chariots and there is no apparent evidence to suggest that either infantry or cavalry bore any ensign.

At the rear of the chariot was carried a lance or standard placed in a diagonal position and leaning backwards. These decorated lances, fixed in a socket (sometimes human headed), had carved ends and bore streamers which terminated in tassels.

(a), (b), (c), and (d) are actual examples from the chariots of Tiglath-Pileser III. Sometimes the spear was replaced by a staff surmounted by a fleur-de-lis instead of the usual spear head.

In the early period, a small crescentic plate of polished metal (e) was fixed either to the centre of the yoke or to the pole. This device served as the earliest true standard and depicted a vulture-headed priest carrying large crosses. This was very similar to the device affixed to Hittite chariots (see Fig. 55a)

This device was later replaced, by Ashurnasirpal II, by two types of standard raised up on a pole. They were fixed upright at the front of the chariot, between the warrior and the charioteer, and fastened to the yoke by a bar or rope.

(f) This consisted of a circular frame containing a representation of the God Ashur standing on a bull's back and drawing a bow.

(g) This was also a circular frame, but bore a geometric design containing 2 bulls back to back with a type of fleur-de-lis, or spear head, between them.

In each case, the standard pole below the disc was ornate and bore tassels, probably of coloured wool or cut leather.

(h) At the time of Sargon II, a solitary standard, uniting the previous designs of (f) and (g), depicted Ashur standing between the 2 rivers firing his bow. Below him were the 2 bulls back to back, as in (g) and the further addition of 2 lion heads. The circular frame of this standard was much narrower than the previous two but was mounted on a more elaborate carved pole head bearing a design of bulls heads. The rings below these heads were for the addition of streamers or tassels.

Chariots

109. Ashurnasirpal II

Originally, the Assyrians had adopted the war chariot used by the Mitanni which was similar to the Egyptian model. These were modified and now had a body with panelled sides and a shield fixed to a bar across the back. A lance or standard was fixed diagonally at the rear and another standard was fastened upright inside the front of the chariot.

The crossed quivers contained arrows, a bow, axe, and sometimes a javelin. The wheels had 6 spokes which fitted into a metal nave for additional strength.

The pole was strengthened at the base by metal hoops and terminated in the head of a bull or some other animal. A cord, or bar, passed from the pole to the upper rim of the body which was connected to the pole head by an elliptical shaped upper shaft. This reinforcing bar was to take the stress from the pole to the vehicle, and also to control the balance at speed. It was merely a rod covered with cloth and divided into compartments containing sacred emblems. It could also have served the purpose of being a rein divider.

The chariot crew had consisted of charioteer and archer but King Ashurnasirpal II added a third rider (the shalshu-rakbu) to protect the warrior by means of a shield.

110. Tiglath-Pileser III

Although, in some cases, the elliptical shaft was retained, it was largely replaced by an iron rod with a loop near the body end.

The chariot body was now rectangular, and not rounded at the front, and higher at the rear. The sides were ornamented and could have been reinforced with squares of plate armour.

The quivers, originally crossed on the sides of the chariot, were now fixed in a vertical position at each front corner.

Tiglath-Pileser III had made the chariots heavier and had replaced the original wheels with much heavier 8 spoked ones, which were probably fitted with iron tyres.

The animal's head on the pole end was replaced, in some cases, by a fan shaped object of polished metal which was attached to the pole by means of a foot stalk. The lance and shield were retained in some cases but were, in the main, discarded.

The third rider, who protected the other two crewmen by means of 2 round shields, was able to hold on to a loop to the front rim. This was to prevent him from falling out of the chariot as he was behind the other two men.

111. Ashurbanipal

Due to additional strengthening of the pole, the reinforcing bar disappeared altogether but the vertical rod from the upper body rim remained.

The lance and shield at the rear of the chariot were dispensed with altogether and, in certain instances, crossed quivers were used in addition to the vertical ones.

The chariot was heavier and larger than previous types and ran on very heavy 8 spoked wheels which usually had the rim studded with nails. The wheels became so large, that in many cases, they were higher than a man.

The crew was increased to 4 men and consisted of the charioteer, archer, and 2 shield bearers each with a large round shield.

HORSES

112. Chariot Horse (Ashurnasirpal II)

The Mesopotamian horse was medium sized and was light of build and slender of limb.

The head harness, richly ornamented, consisted of a cheek strap divided into 3 parts to a dovetail shaped bit, 2 throat bands, and an ornamental necklace. A semi-circular mount on the head held feathers or horsehair, with a tassel at the rear.

They had a complicated system of breast straps and had 2 or 3 girths to secure the harness. The outer reins passed through a ring on the breast strap and were then kept in position by means of a pendant side ornament which served as a weight for pulling the rein downwards. This ornament bore tassels, possibly of cut leather which could have been coloured red and blue alternately, as they certainly were in later periods.

Horses were heavily caparisoned with an embroidered housing of felt, wool, or leather, and the tail was tied in the middle.

The third chariot horse, added by Ashurnasirpal II, and has been called an "outrigger", was hitched lightly to the chariot. If it was a spare and did no pulling, it would have been no use at all. Some authorities are of the opinion that 4 horses were actually used but were not all depicted.

(a) shows an alternative type of crest for the horse's head.

113. Cavalry Horse (Ashurnasirpal II)

Originally, cavalry horses wore the same trappings as the chariot horses. This included a large crescent shaped collar which consisted of a broad strap of leather round the neck and chest. This collar used first from habit, was highly decorated and ornamented with tassels. In some cases, a small square saddlecloth, usually ornamented and with tassels, was used in conjunction with a band which passed round the horse's body horizontally.

Neither stirrups nor saddles had been invented yet, and the early cavalymen rode with the knees drawn up high pressed against the horse's neck. They had not discovered the correct way of riding at this early stage and, therefore, the legs and feet of the rider hung close to the shoulder.

The horsemen operated in pairs with one man controlling the horses.

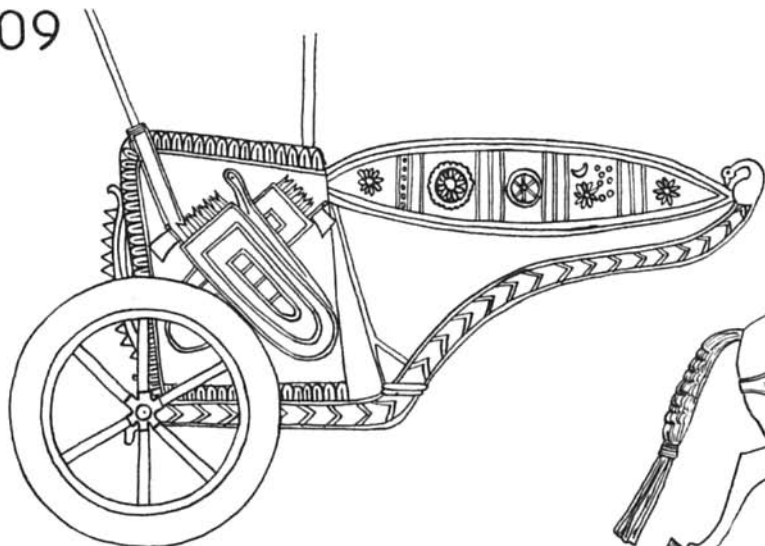
114. Cavalry Horse (Sargon II)

Most characteristic of this period was the frontlet on the forehead and the widespread use of saddle cloths. The frontlet was probably of hollow metal carved to represent scales. The head crests of this period were either a helmet crest, a crescent, or a tassel shaped tuft. Attached to the throat band, underneath, was either a bell, or a 3 tier tasseled object. The ornamental collar was retained, shaped differently, but the necklace had been abandoned.

Saddle cloths were either square or saddle shaped, and either ended in a tassel or were cut into 3 or 4 points to resemble a wild beast skin. These cloths were of hide or thick felt, and were later extended to the rear to cover most of the horse.

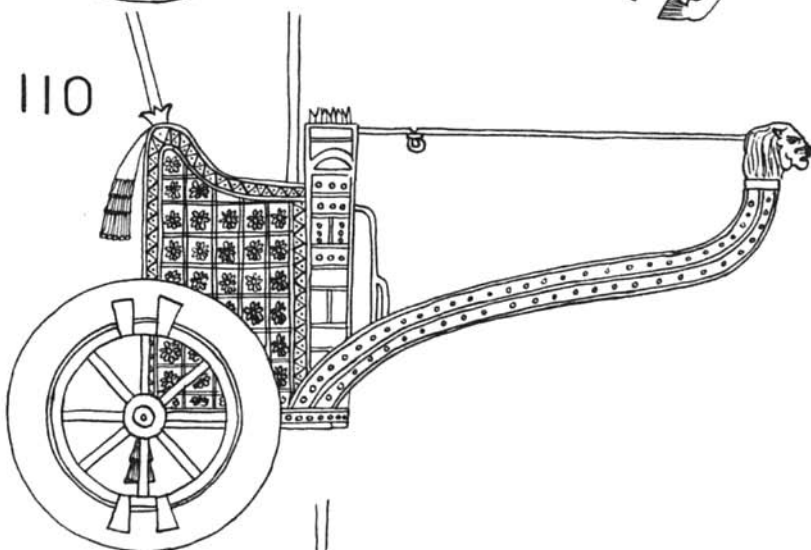
The horses tails were now looped at the end and much advancement had been made in riding. The attendant was no longer required as the cavalymen could ride more naturally now.

109

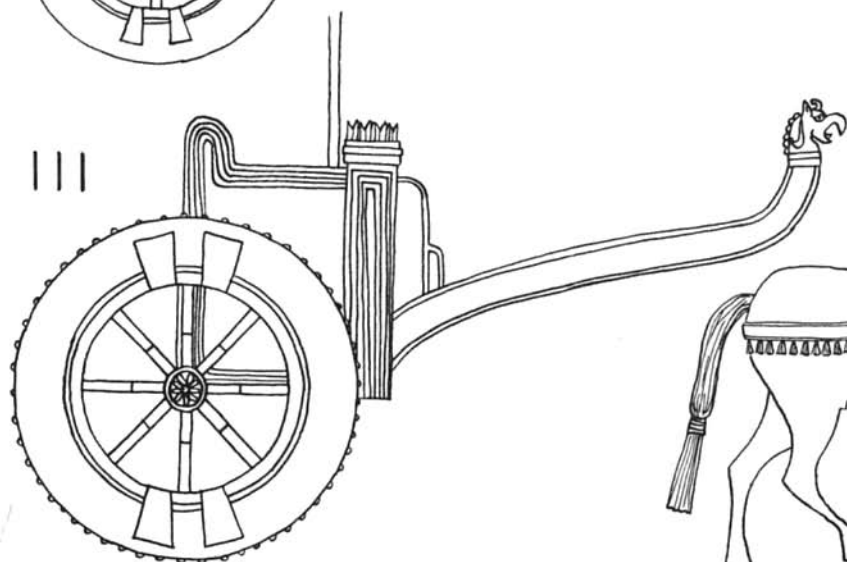


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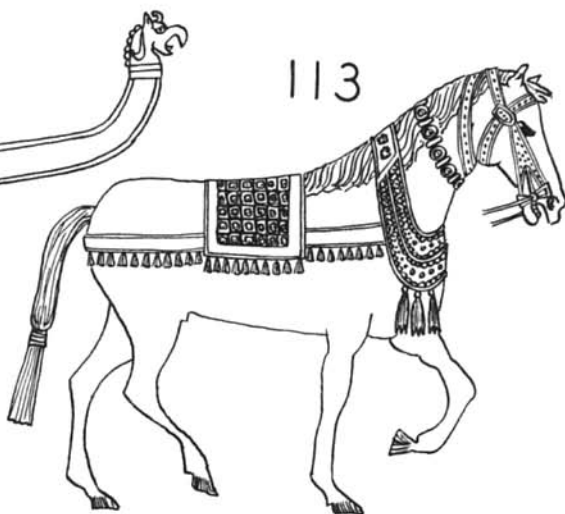
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113



115. Chariot Horse (Ashurbanipal)

Chariot horses of this period wore a somewhat simpler head harness with only one throat band, and a bit consisting of a simple curved bar. Plumes had multiple tassels, circular crests, and one that curved forward like the helmet crest. The tall feathered plumes on Assyrian horses had been adopted from the Egyptians, possibly by Esarhaddon when he had fought in that country.

The pendant side ornament had disappeared and the outer rein now passed through the ends of the yoke.

Chariots of this period were drawn by either 2 or 4 horses. Only 2 were depicted but the charioteer is holding 2 pairs of reins which could indicate 4 horses. It appears that some were drawn by only 2 horses but some were apparently drawn by more.

BATTERING RAMS

116. Ashurnasirpal II

Battering rams were mounted on a wooden framework, covered with wickerwork which contained the crew. They were moved, on either 4 or 6 wheels, by a gang of men or by animals.

The ram, with a trumpet shaped head of metal, was hung on a beam in such a way that the blows could be directed at various points within an arc. This cross beam was held in the round-topped tower and the ram was operated by men in the base of the main body. The blows from the weighted head were hoped to dislodge the bricks of the fortress wall and provide a breach.

Rams of this period were provided with a high tower which contained soldiers who attacked the enemy on the walls as well as protecting the engine.

The defenders would try to set fire to the siege engines so they were provided with projecting spouts, made of leather, which were connected to a water supply on the top of the tower.

Working in conjunction with the battering rams was a form of catapult of wood with a triangular framework of twisted rope at the top. They hurled great stones and were operated from platforms of brick and wood. They had to work close to the walls and were easily set on fire.

117. Shalmaneser III

This type of ram had panelled sides, 4 external wheels, and a head in the form of an animal. The 2 towers near the front were to protect the archers who shot from behind them. One crew member operated the bar, or cable, which was possibly connected with the ram mechanism. To do this, he sat on the front of the engine.

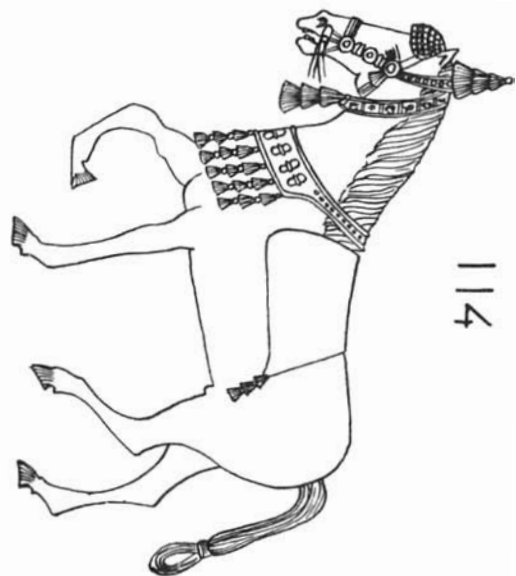
The larger types of battering ram had been abandoned because of their unwieldiness and were replaced by this type which attacked the base of the walls.

A similar type had a pointed head and a tower containing soldiers. It had 6 wheels and was provided with handles at the back in order to run it bodily against the wall as it had no rocking beam.

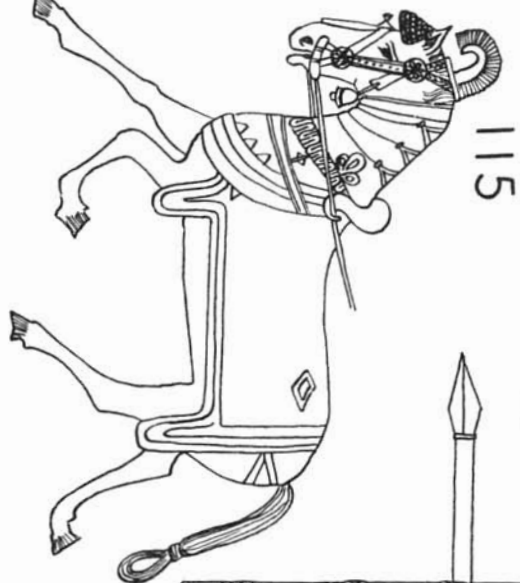
118. Tiglath-Pileser III

Battering rams were now simpler and smaller, and had a lighter structure. They now required banks of earth and brick in order to reach the upper part of the defences.

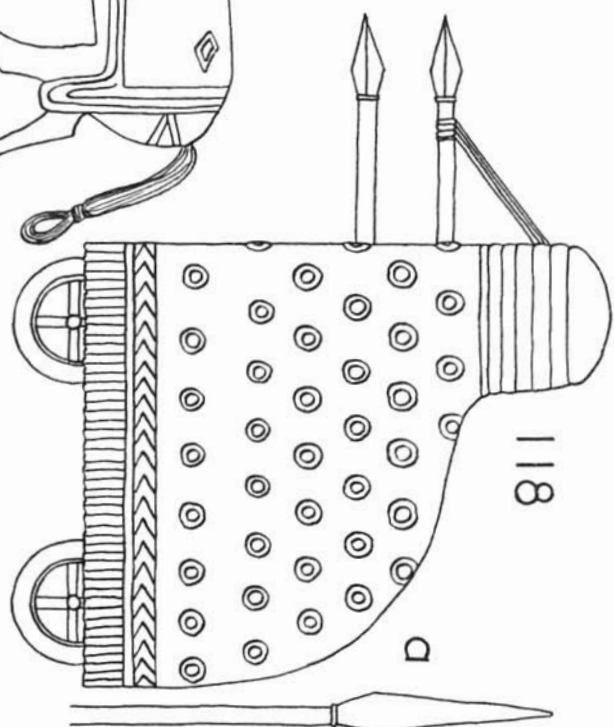
The engine shown had a tower in front and 2 spear-headed rams which were inserted between the bricks and levered from side to side. The points of these machines were always directed upwards to destroy the fortifications or the wooden battlements.



114

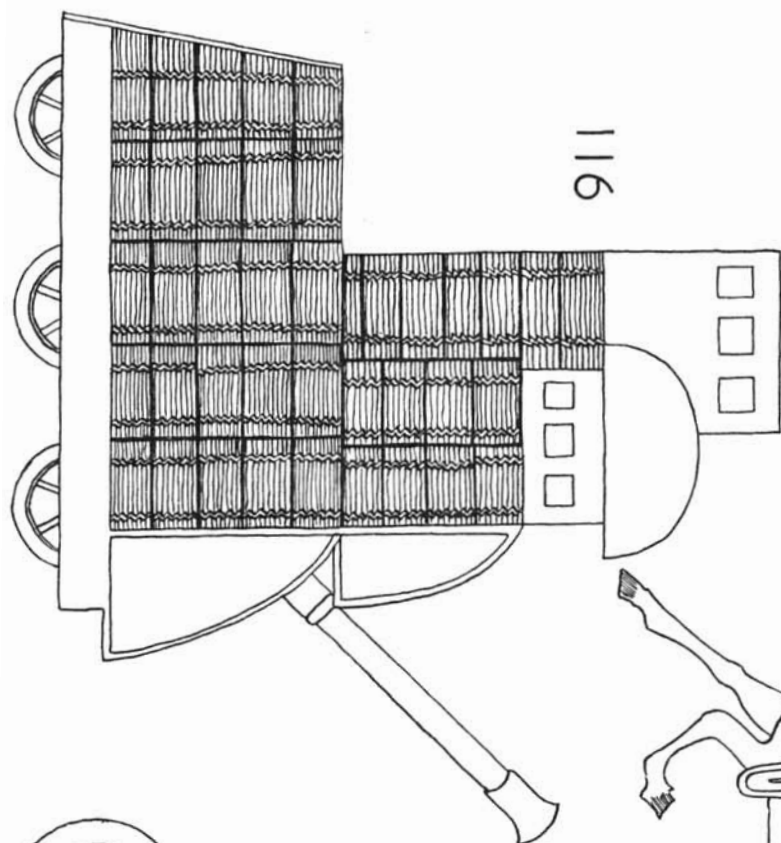


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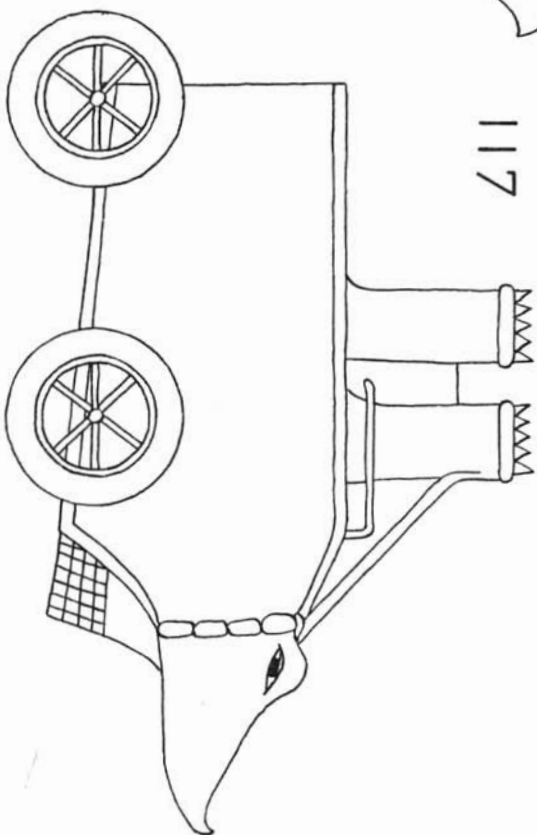


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116



117



Rams of Sennacherib had only one long spear-shaped head (a), and a raised, shield-like front, to protect the archers.

Fire was used against these engines so one crew member's job was to pour water on the machine from buckets and a long-handled ladle.

Under Ashurbanipal, battering rams were no longer used and the undermining of walls was done by heavily armoured engineers protected by large shields.

OTHER PUBLICATIONS

This, the fourth in our series will be followed by booklets covering Classical Greece and its Enemies and then onwards through the Dark Ages, followed by early Medieval times. An SAE will bring our current list.

There will, we hope, be a large number of readers who may well be attracted to the two rapidly growing hobbies of Wargaming and Model Figure collecting, and there are a number of specialist magazines which cater especially for these interests:—

Models

Military Modelling
13-35 Bridge Street
Hemel Hempstead
Herts.

Monthly—Annual
Subscription £3.25
U.S.A. \$8.50
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Airfix Magazine
Surrudge Dawson & Coy
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London S.E.1.

Monthly—Annual
Subscription £2.88
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Wargaming

Wargamers Newsletter.
Belmont-Maitland (Publishers) Ltd.
Tradition, 188 Piccadilly,
London W1V 9DA.

Monthly—Annual
Subscription £3.60
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All the above contain information and advertisements by suppliers of model figures and equipment in various scales, and all periods.

The Society of Ancients Journal 'Slingshot' has already been mentioned. This Society specializes in military history and Wargaming of the Ancient and Medieval periods, and Slingshot is generally recognised as the best value for money in this sphere.

Annual Subscription is £1.50.

We will be pleased to pass on enquiries to the Society — Please include a stamped addressed envelope.

Finally, we would not be human if we did not mention our Wargame Rules 1000 B.C. to 1000 A.D. These are a revised reprint of the Rules that have been in use since 1969, have been chosen by four successive national Wargames Convention organisers and have been adopted by the Society of Ancients. They will be on the bookshelves of the more enlightened model shops, or can be obtained direct, at 90p including postage in U.K. from:—

Wargames Research Group,
75, Ardingly Drive,
Goring by Sea,
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